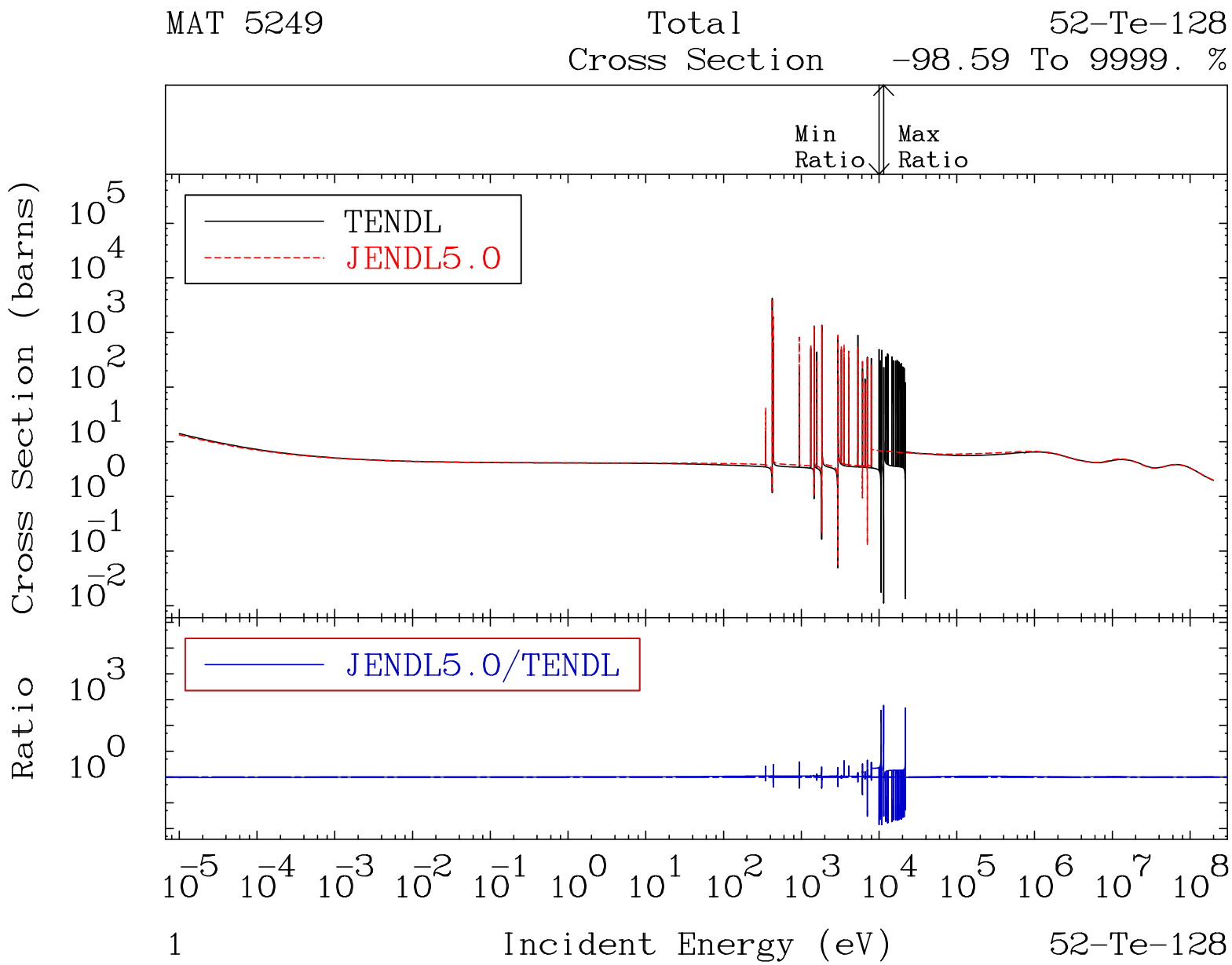
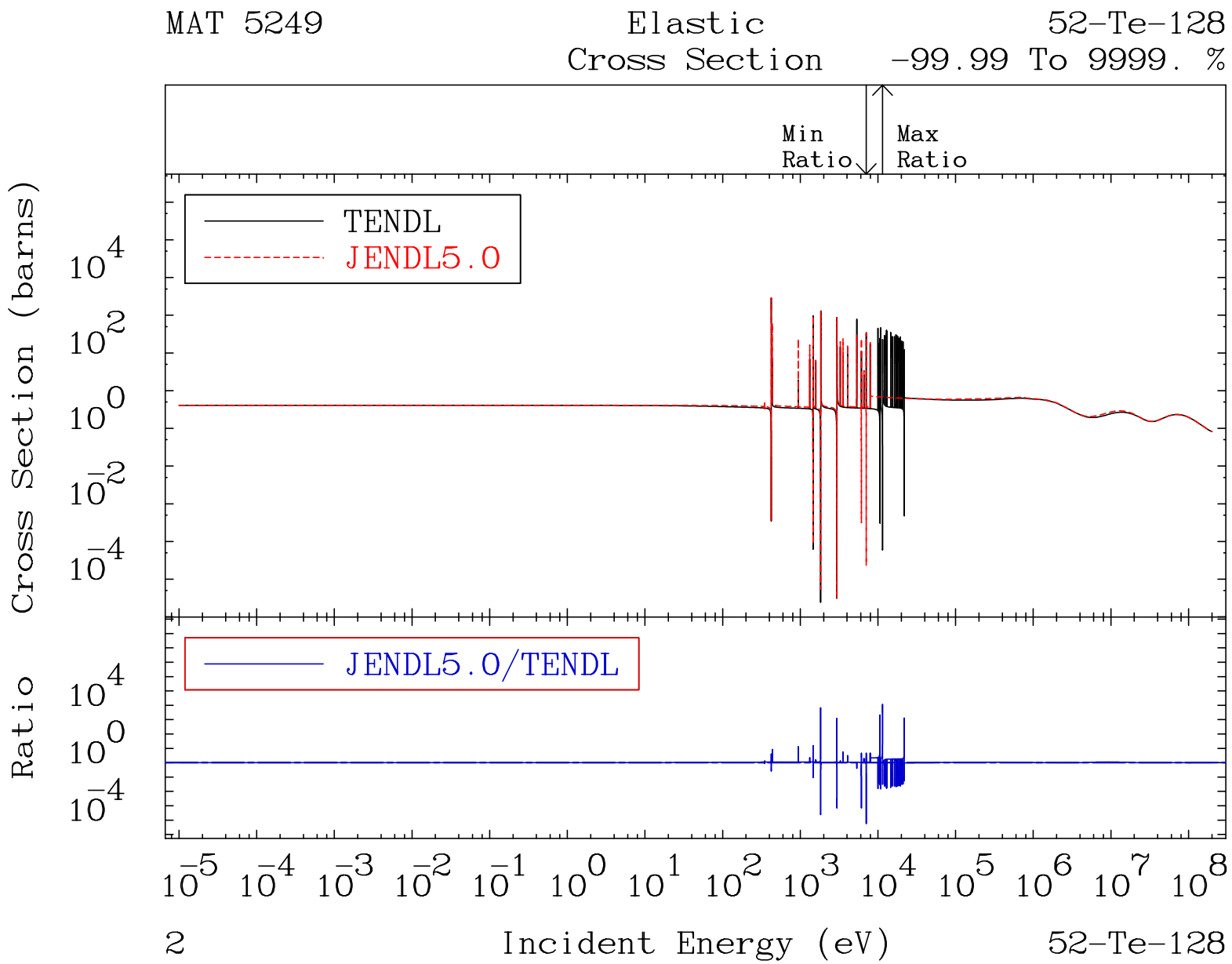
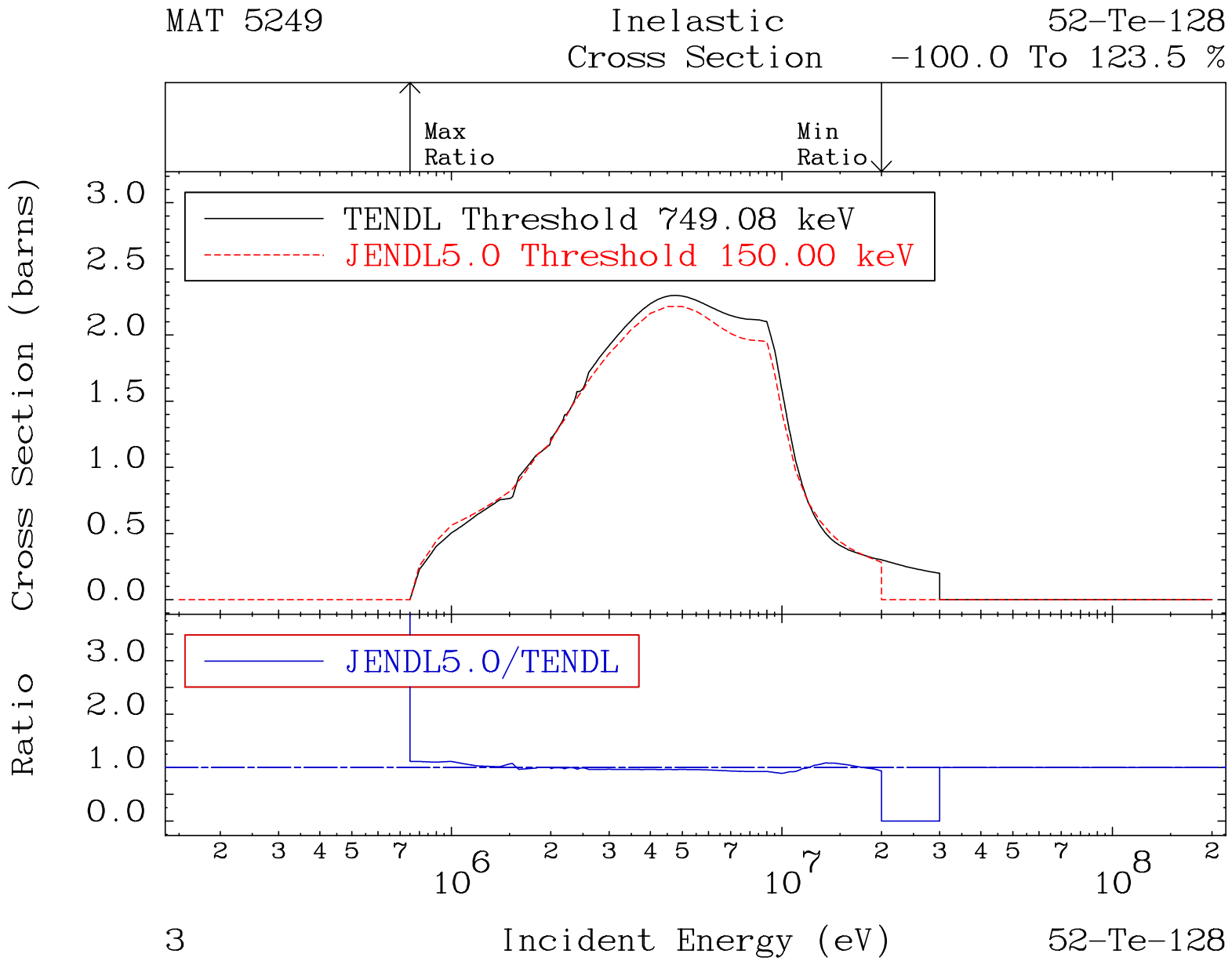
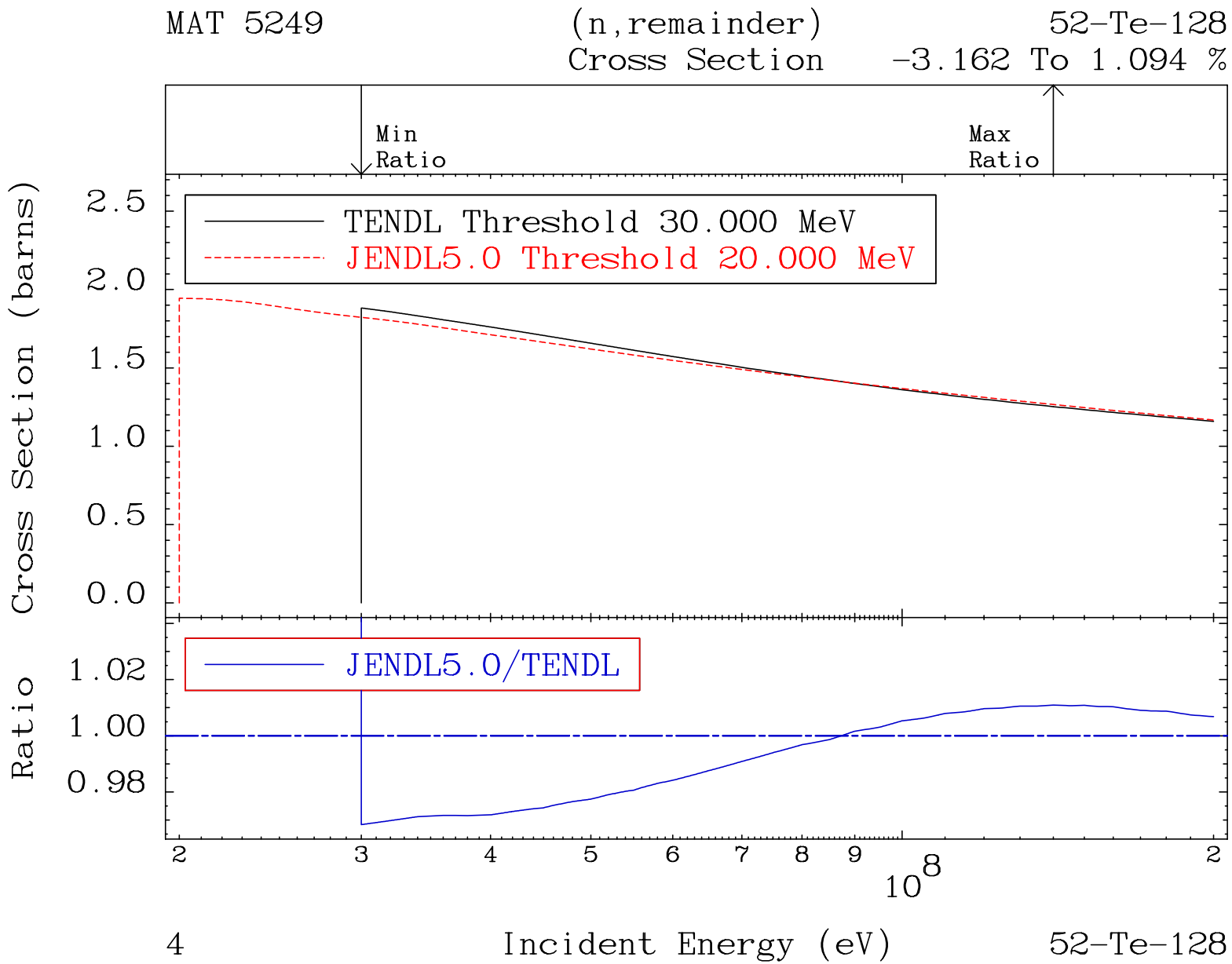
Program Complot
(Version 2021-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

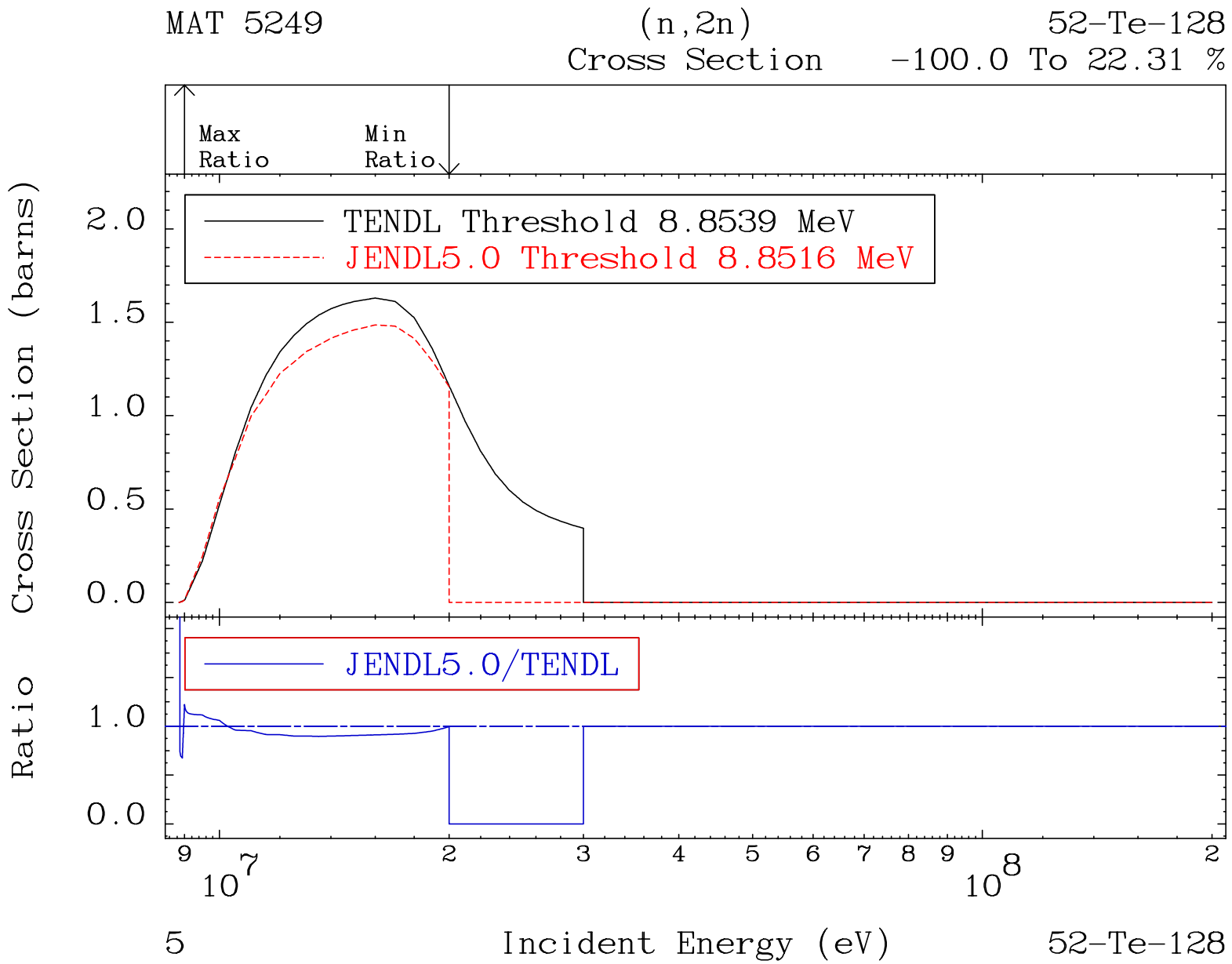
Press Mouse Button to Start

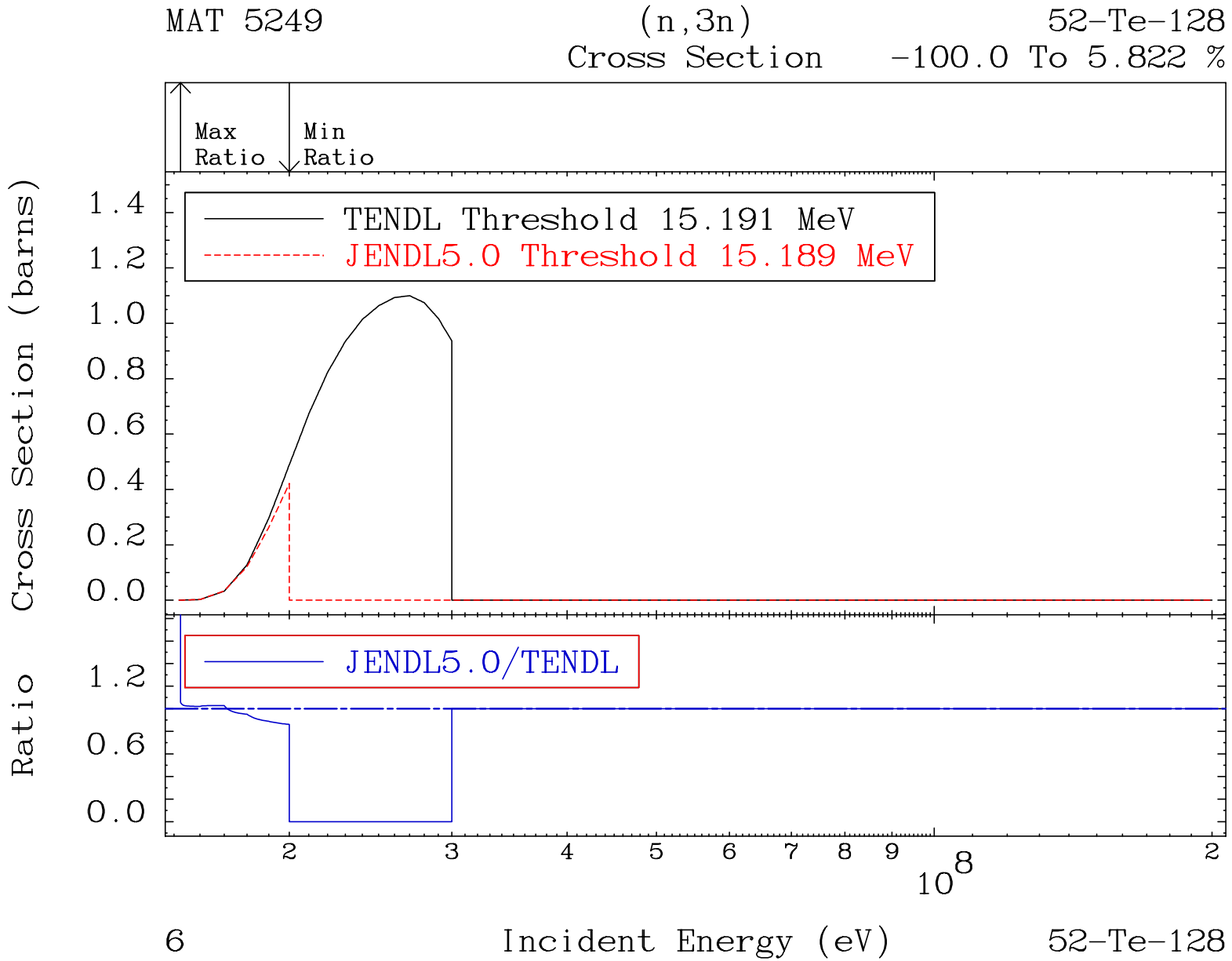

MAT 5249
Total
Cross Section
52-Te-128
-98.59 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
1
52-Te-128

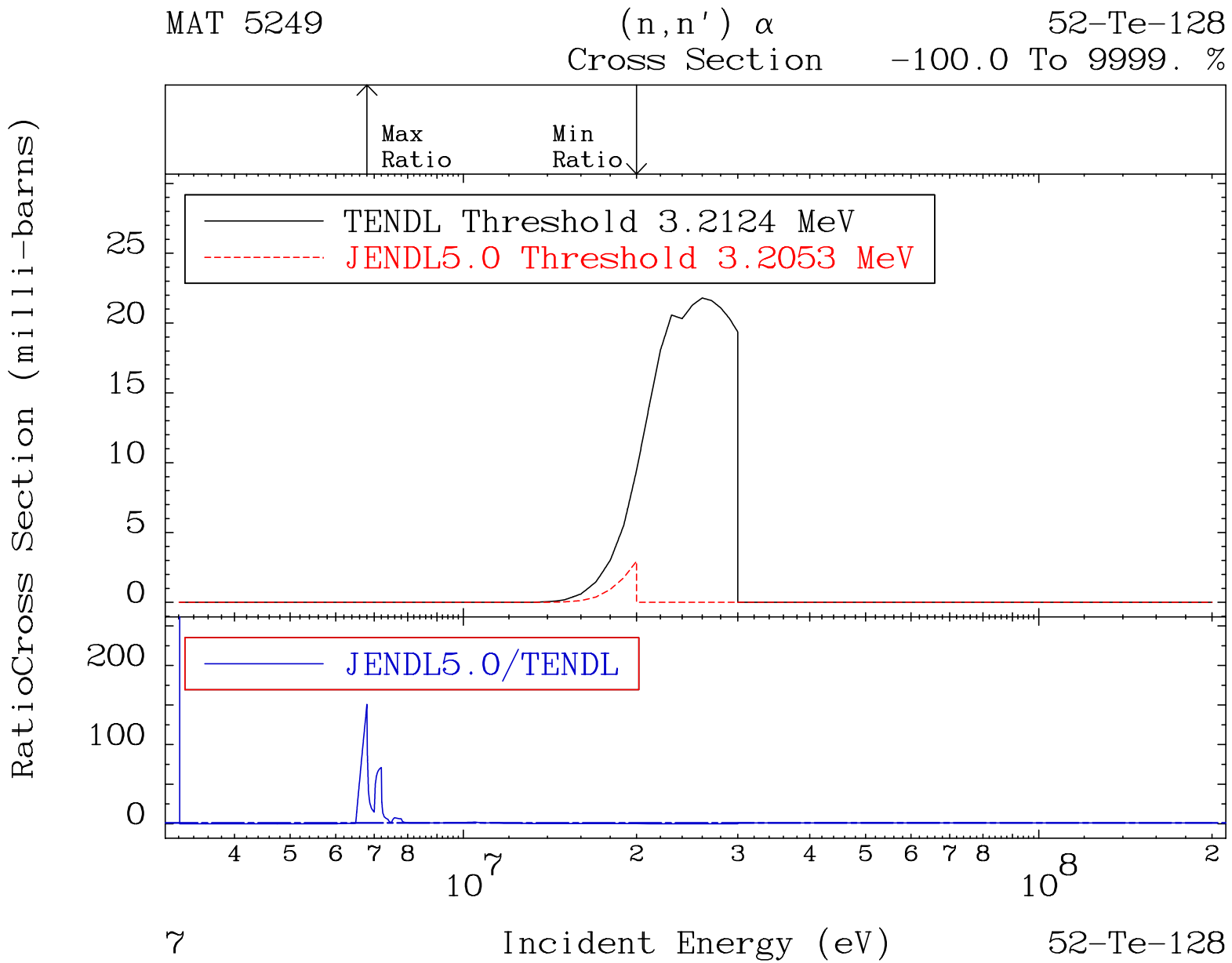

MAT 5249
Elastic
Cross Section
52-Te-128
-99.99 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
Ratio
JENDL5.0/TENDL
Incident Energy (eV)
2
52-Te-128

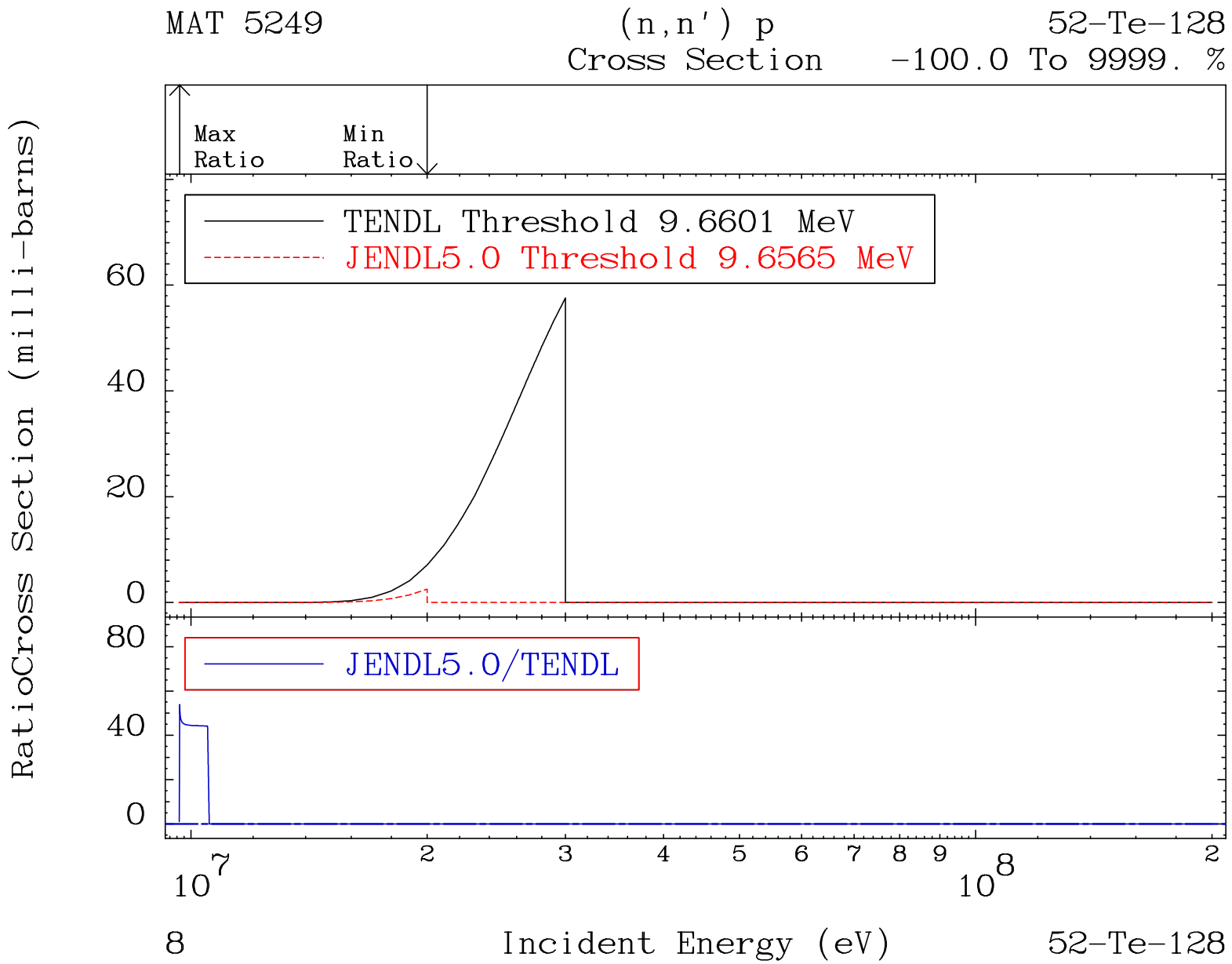

MAT 5249
Inelastic
Cross Section
52-Te-128
-100.0 To 123.5 %
Max
Ratio
Min
Ratio
TENDL Threshold 749.08 keV
JENDL5.0 Threshold 150.00 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
Incident Energy (eV)
3
52-Te-128

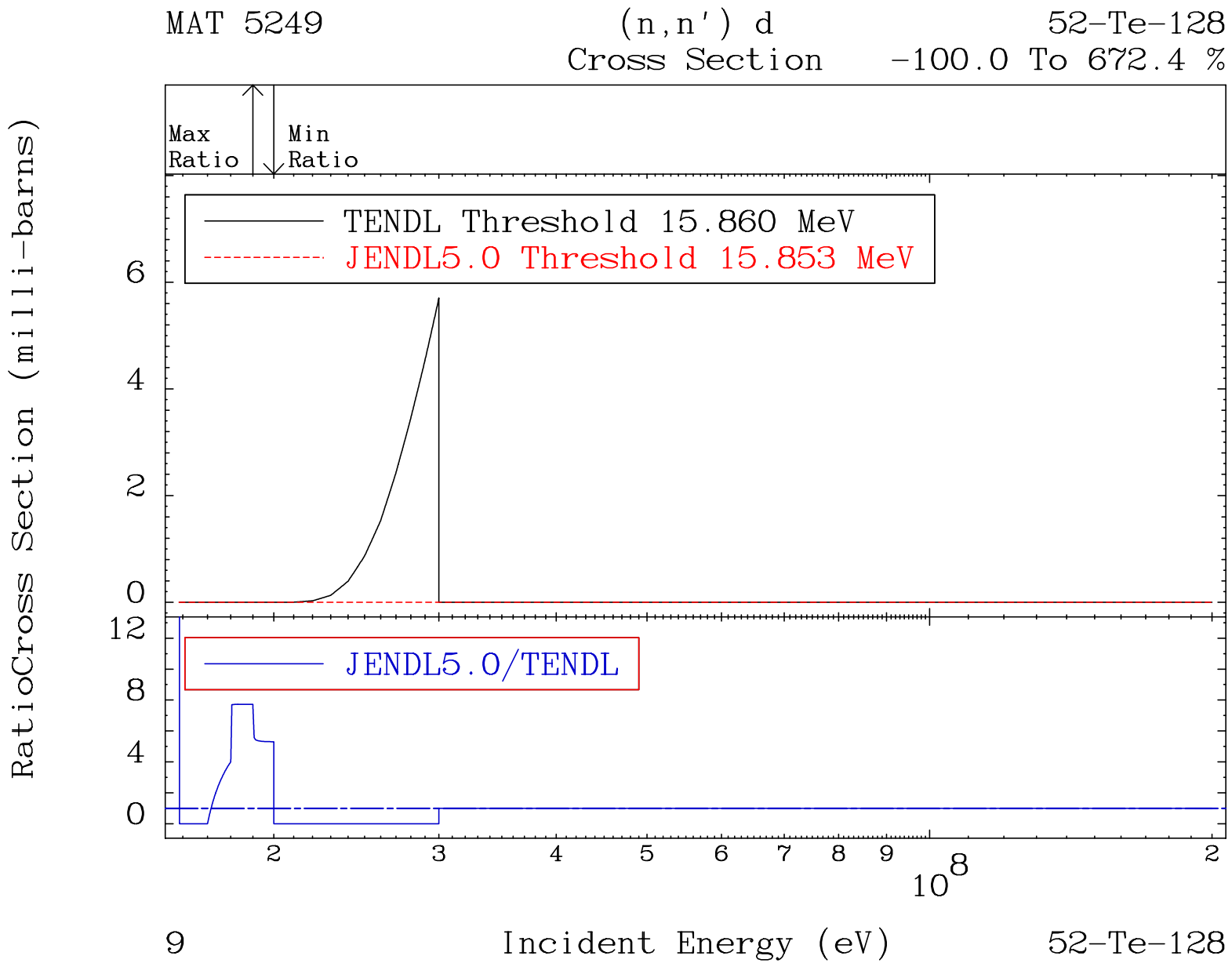

MAT 5249
(n,remainder)
Cross Section
52-Te-128
-3.162 To 1.094 %
Min
Ratio
Max
Ratio
TENDL Threshold 30.000 MeV
JENDL5.0 Threshold 20.000 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
JENDL5.0/TENDL
Ratio
1.02
1.00
0.98
2
3
4
5
6
7
8
9
2
10^8
4
Incident Energy (eV)
52-Te-128

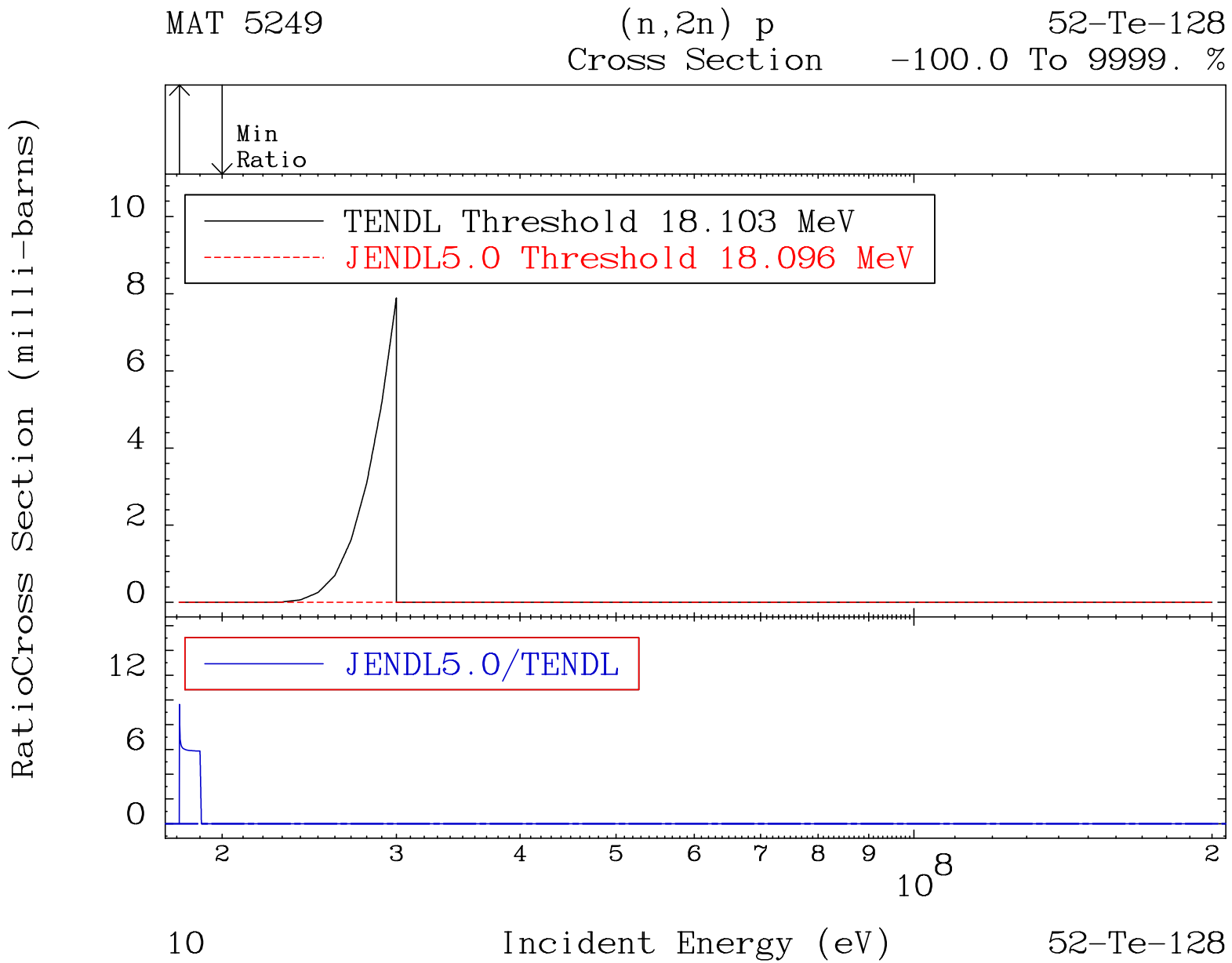

MAT 5249
(n,2n)
Cross Section
52-Te-128
-100.0 To 22.31 %
Max Ratio
Min Ratio
TENDL Threshold 8.8539 MeV
JENDL5.0 Threshold 8.8516 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
1.0
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
52-Te-128

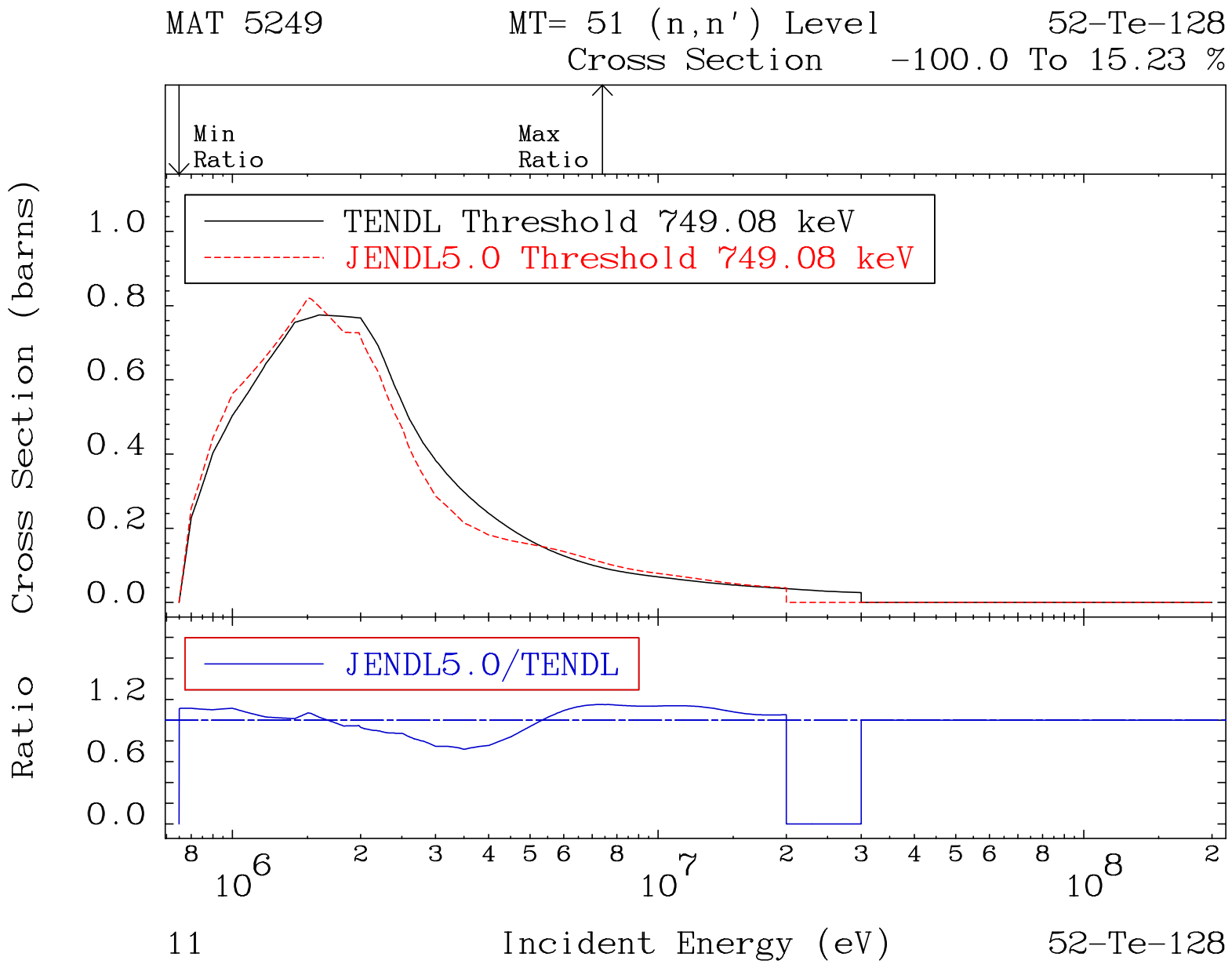

MAT 5249
(n,3n)
52-Te-128
Cross Section
-100.0 To 5.822 %
Max Ratio
Min Ratio
TENDL Threshold 15.191 MeV
JENDL5.0 Threshold 15.189 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JENDL5.0/TENDL
Ratio
1.2
0.6
0.0
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
52-Te-128

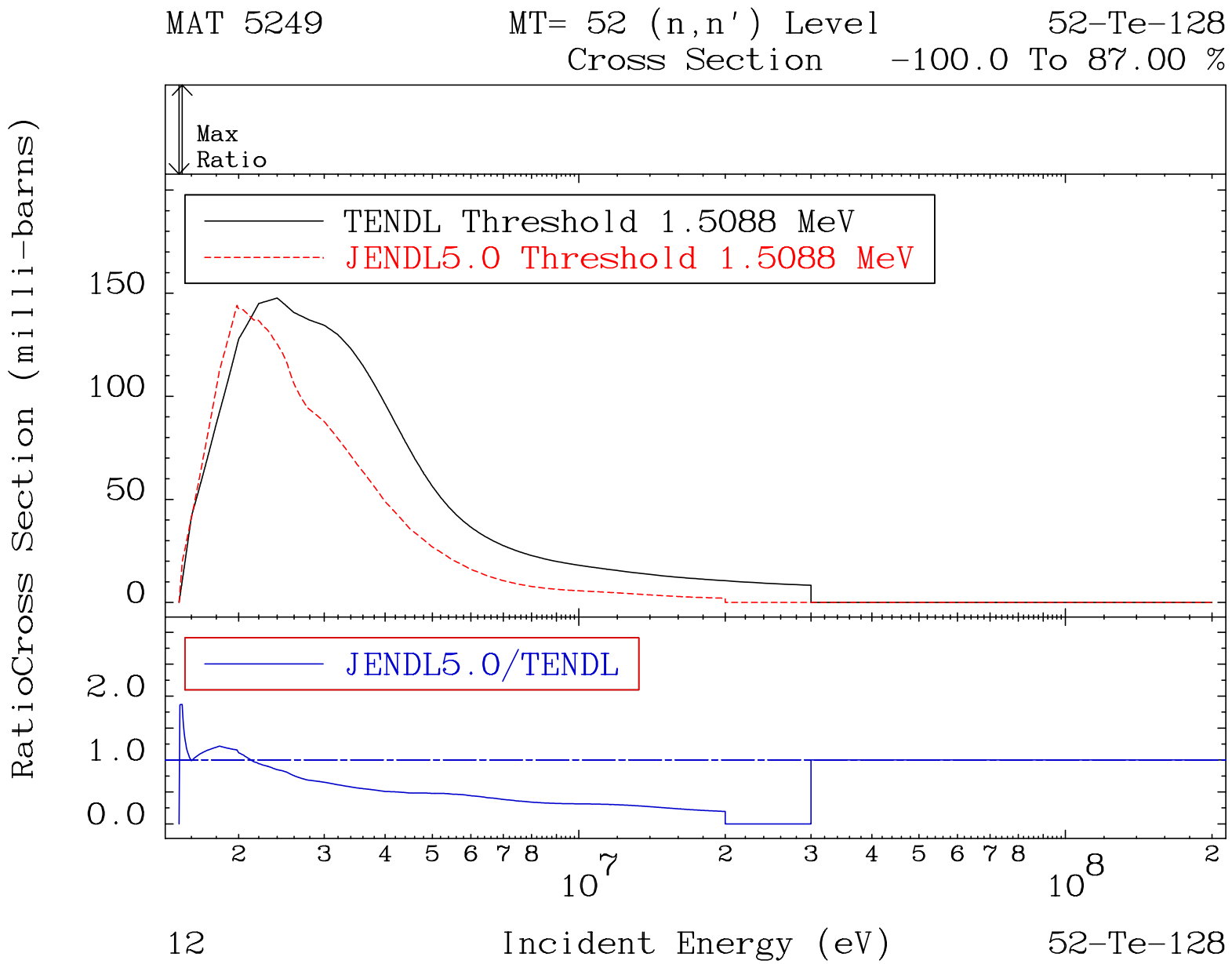

MAT 5249
(n,n') α
Cross Section
52-Te-128
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 3.2124 MeV
JENDL5.0 Threshold 3.2053 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
200
100
0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
7
Incident Energy (eV)
52-Te-128

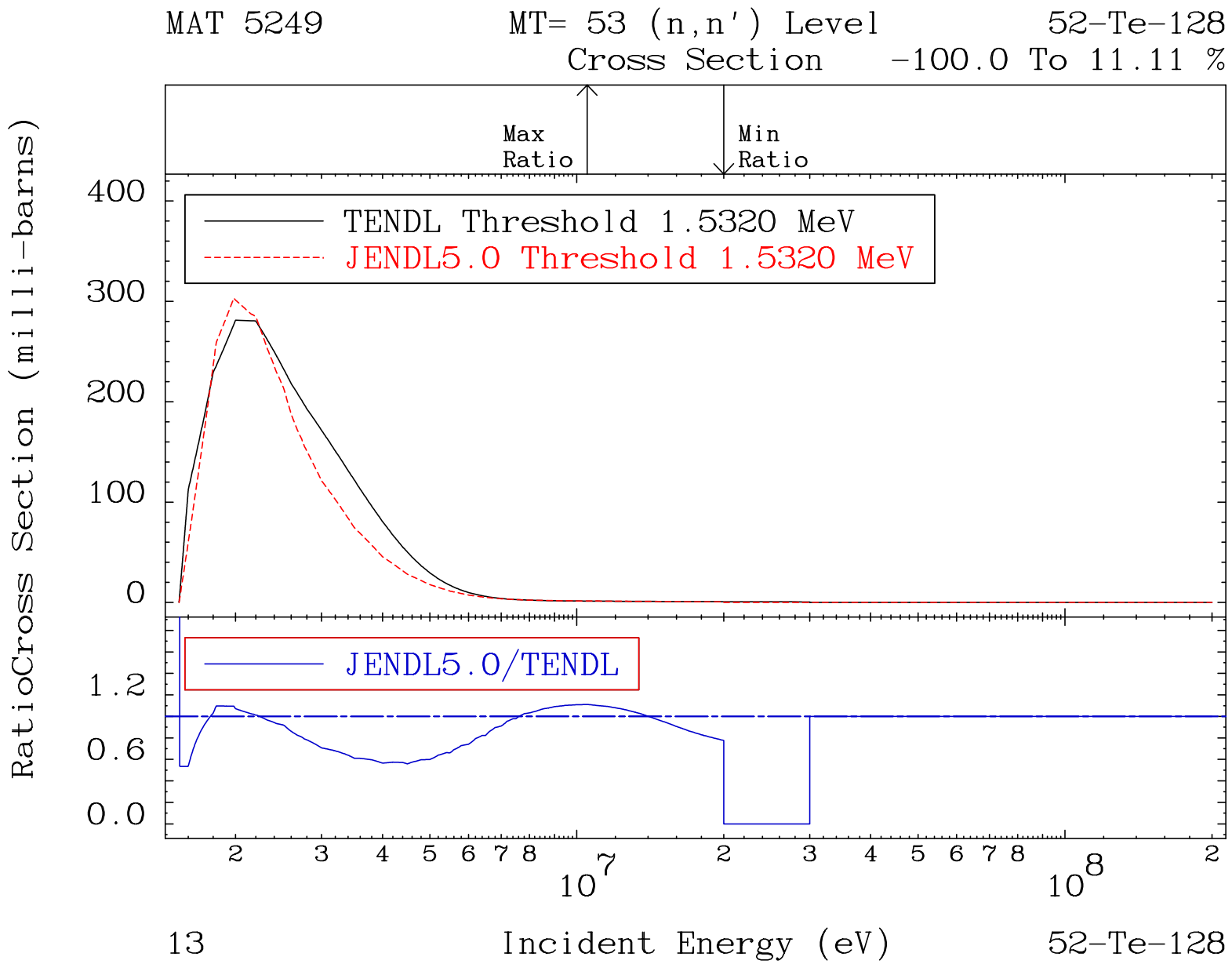

MAT 5249
(n,n') p
Cross Section
52-Te-128
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 9.6601 MeV
JENDL5.0 Threshold 9.6565 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
60
40
20
0
80
40
0
10^7
2
3
4
5
6
7
8
9
10^8
2
Incident Energy (eV)
52-Te-128
8

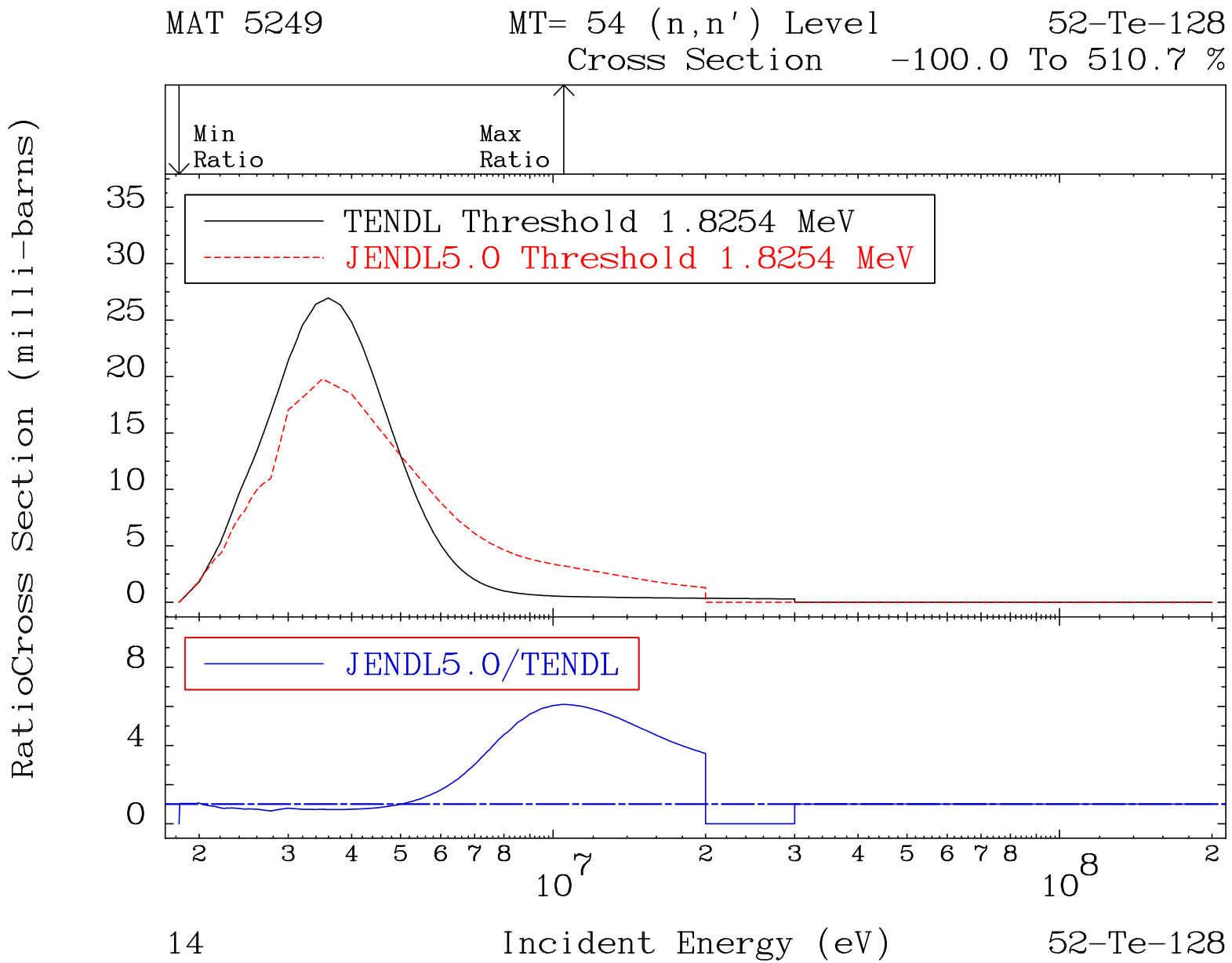

MAT 5249
(n,n') d
Cross Section
52-Te-128
-100.0 To 672.4 %
Max Ratio
Min Ratio
TENDL Threshold 15.860 MeV
JENDL5.0 Threshold 15.853 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
9
52-Te-128

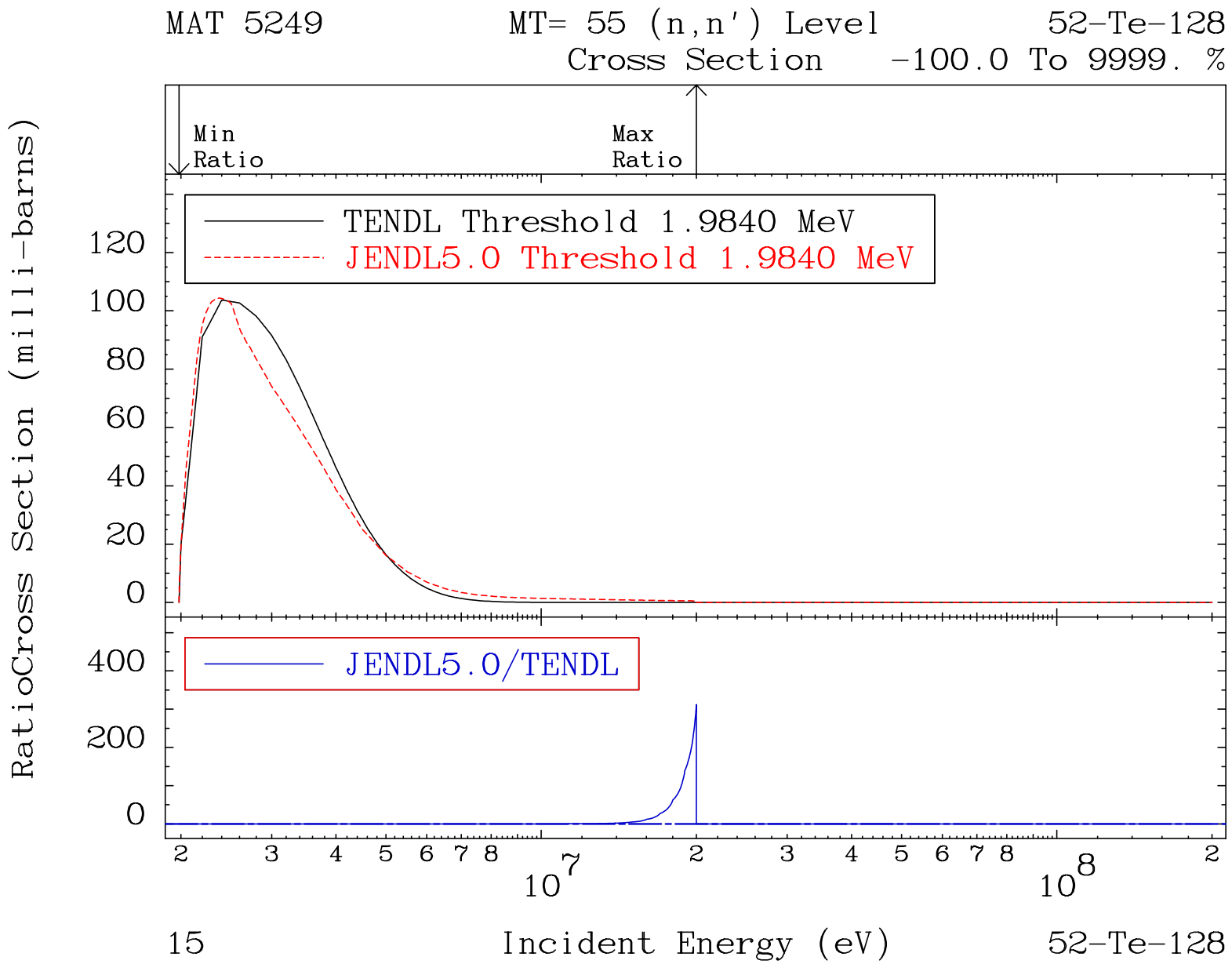

MAT 5249
(n,2n) p
Cross Section
52-Te-128
-100.0 To 9999. %
Min
Ratio
TENDL Threshold 18.103 MeV
JENDL5.0 Threshold 18.096 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
10
8
6
4
2
0
12
6
0
2
3
4
5
6
7
8
9
10^8
2
10
Incident Energy (eV)
52-Te-128

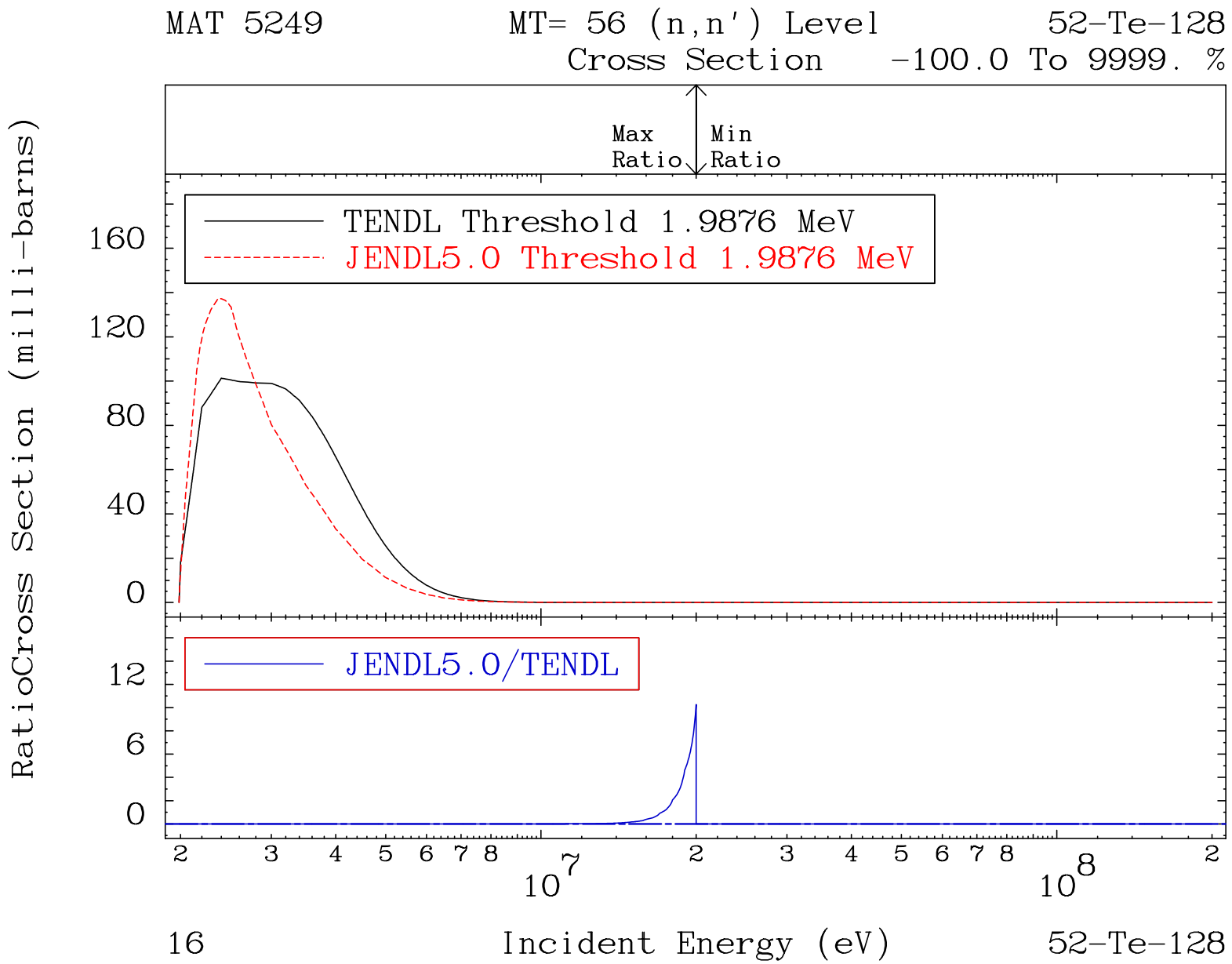

MAT 5249
MT= 51 (n,n') Level
52-Te-128
Cross Section -100.0 To 15.23 %
Min Ratio
Max Ratio
TENDL Threshold 749.08 keV
JENDL5.0 Threshold 749.08 keV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
JENDL5.0/TENDL
Ratio
1.2
0.6
0.0
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
11
Incident Energy (eV)
52-Te-128

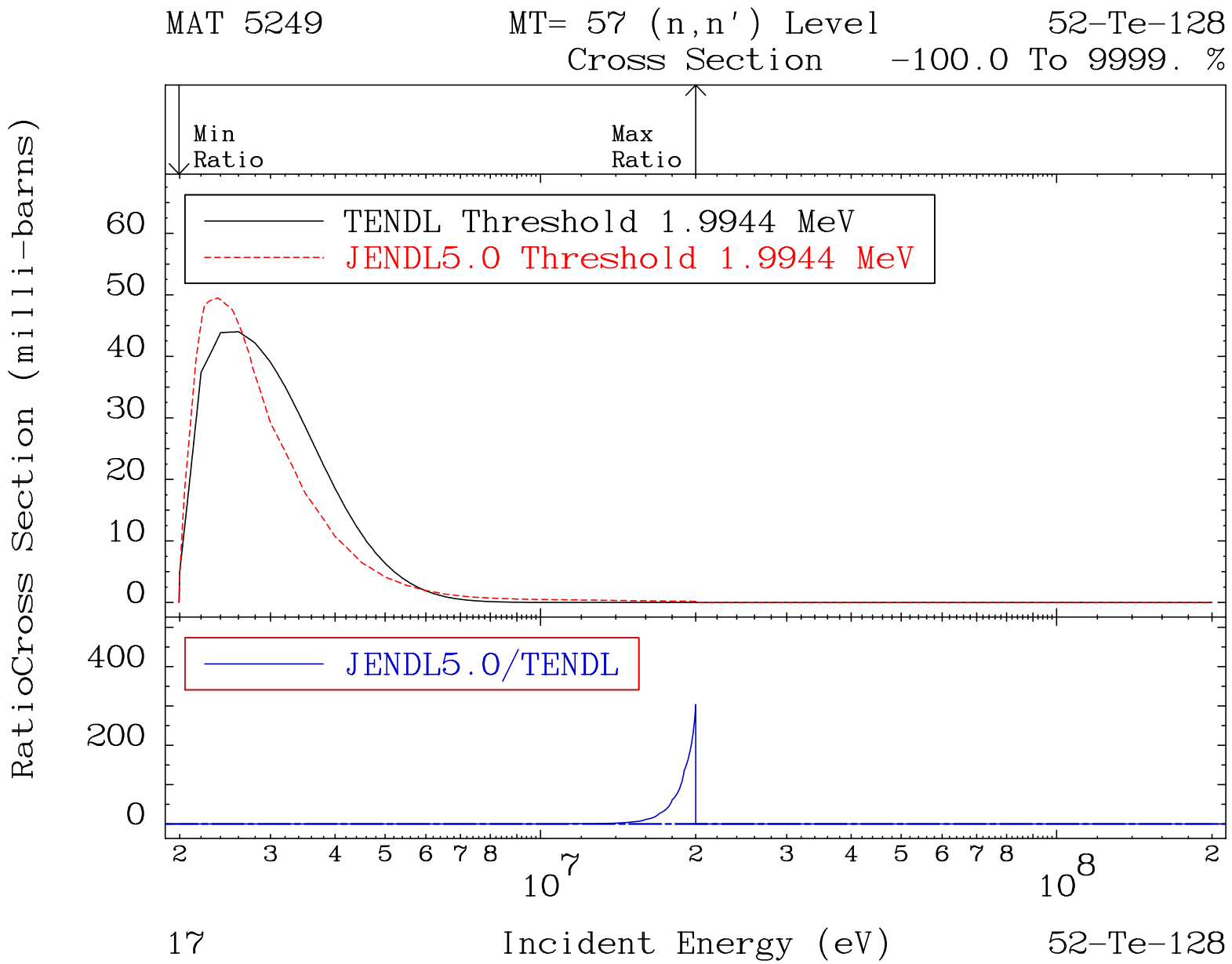

MAT 5249
MT= 52 (n,n') Level
52-Te-128
Cross Section
-100.0 To 87.00 %
Max
Ratio
TENDL Threshold 1.5088 MeV
JENDL5.0 Threshold 1.5088 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
150
100
50
0
2.0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
12
Incident Energy (eV)
52-Te-128

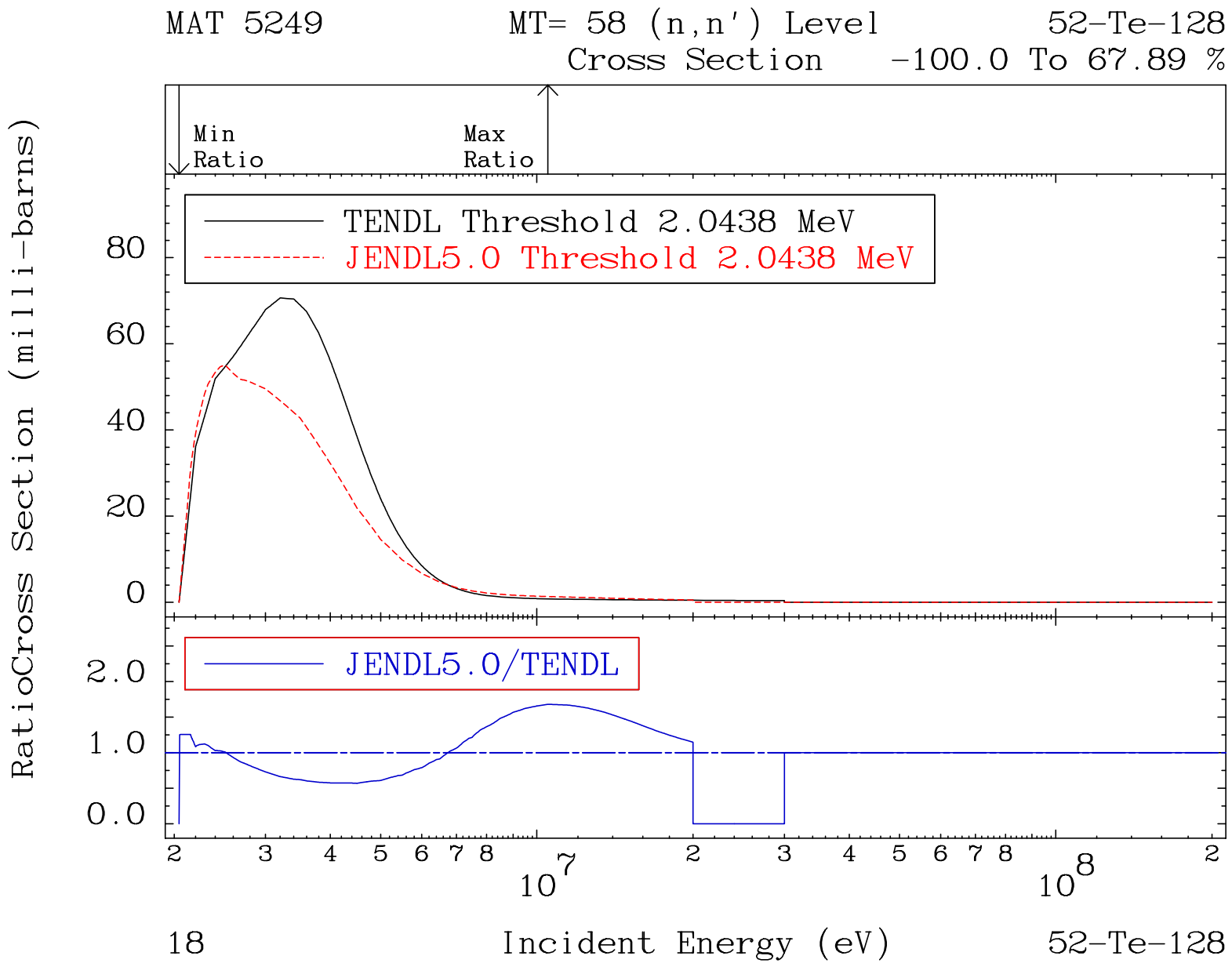

MAT 5249
MT= 53 (n,n') Level
52-Te-128
Cross Section -100.0 To 11.11 %
Max Ratio
Min Ratio
TENDL Threshold 1.5320 MeV
JENDL5.0 Threshold 1.5320 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
1.2
0.6
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
13
Incident Energy (eV)
52-Te-128

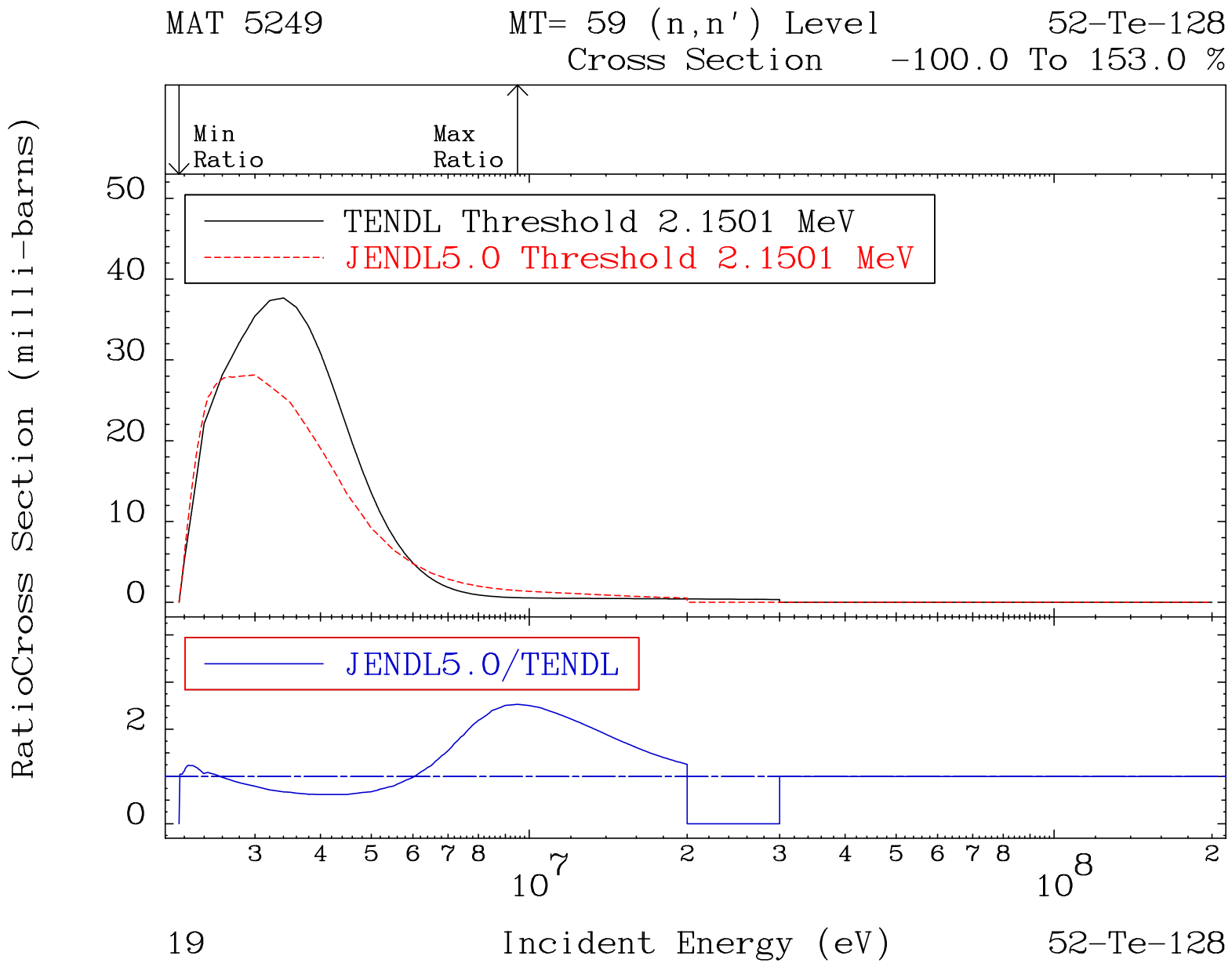

MAT 5249
MT= 54 (n,n') Level
52-Te-128
Cross Section
-100.0 To 510.7 %
Min Ratio
Max Ratio
TENDL Threshold 1.8254 MeV
JENDL5.0 Threshold 1.8254 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
35
30
25
20
15
10
5
0
8
4
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
14
Incident Energy (eV)
52-Te-128

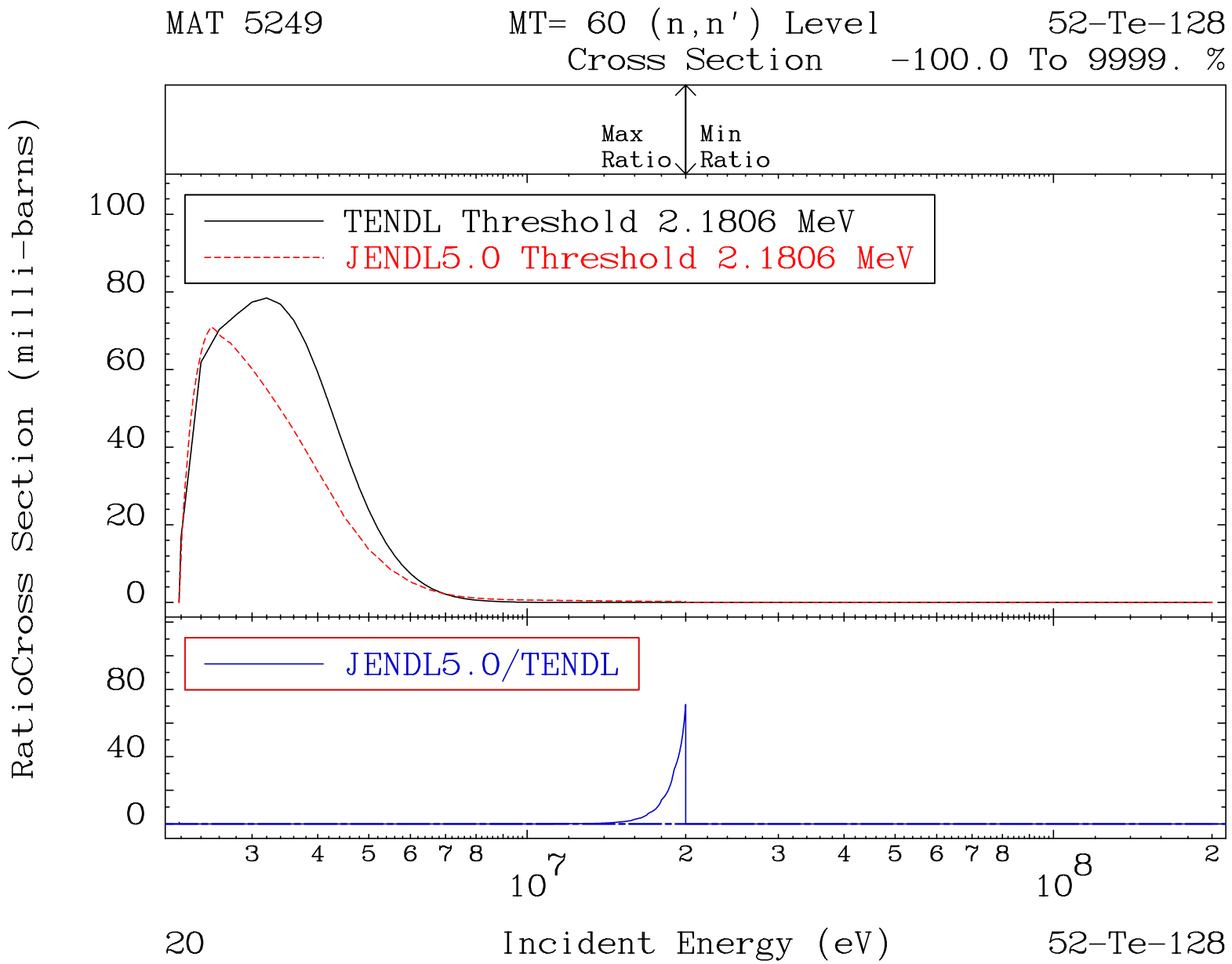

MAT 5249
MT= 55 (n,n') Level
52-Te-128
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.9840 MeV
JENDL5.0 Threshold 1.9840 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
400
200
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
15
Incident Energy (eV)
52-Te-128

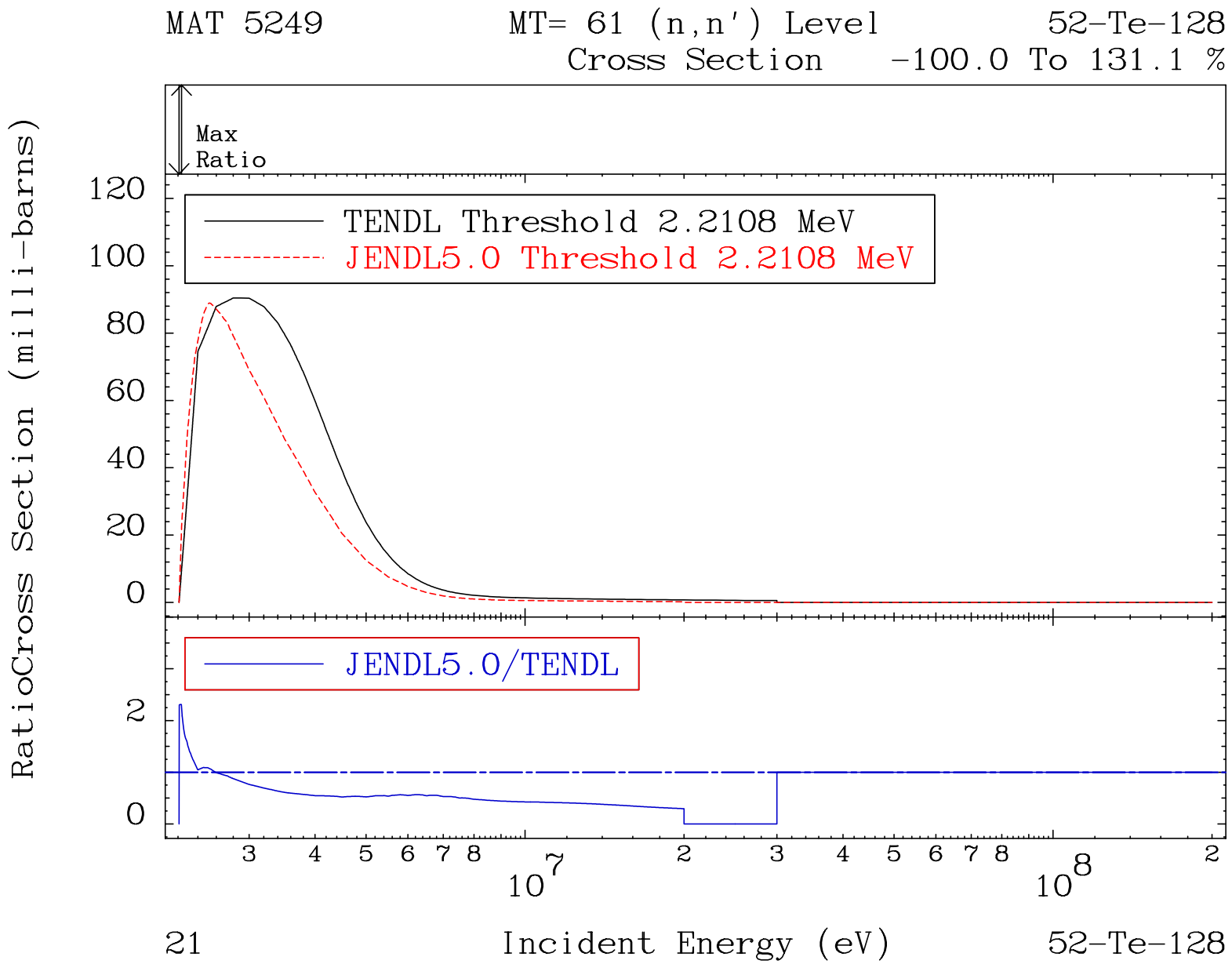

MAT 5249
MT= 56 (n,n') Level
52-Te-128
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.9876 MeV
JENDL5.0 Threshold 1.9876 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
12
6
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
16
Incident Energy (eV)
52-Te-128

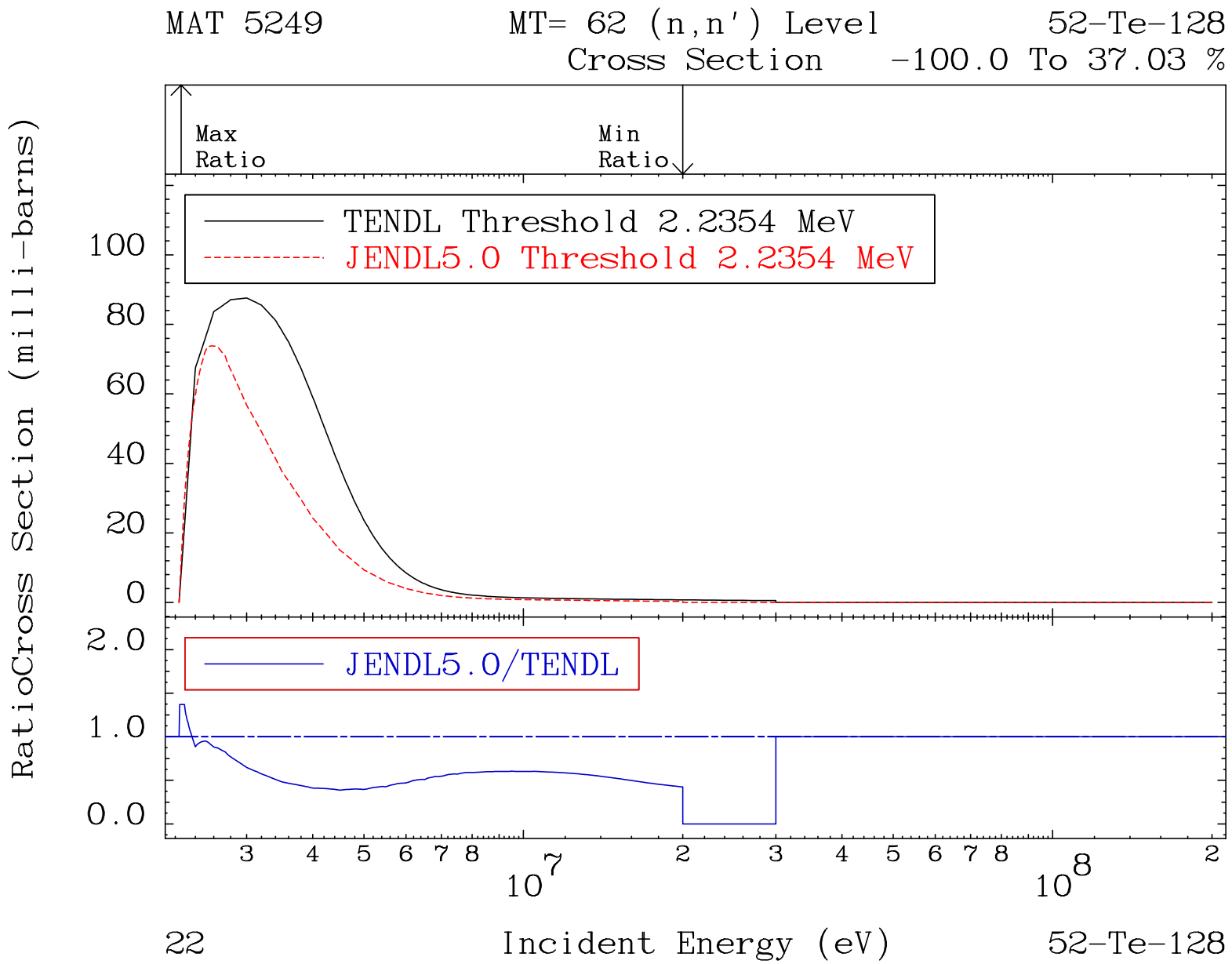

MAT 5249
MT= 57 (n,n') Level
52-Te-128
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.9944 MeV
JENDL5.0 Threshold 1.9944 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
400
200
0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
17
Incident Energy (eV)
52-Te-128

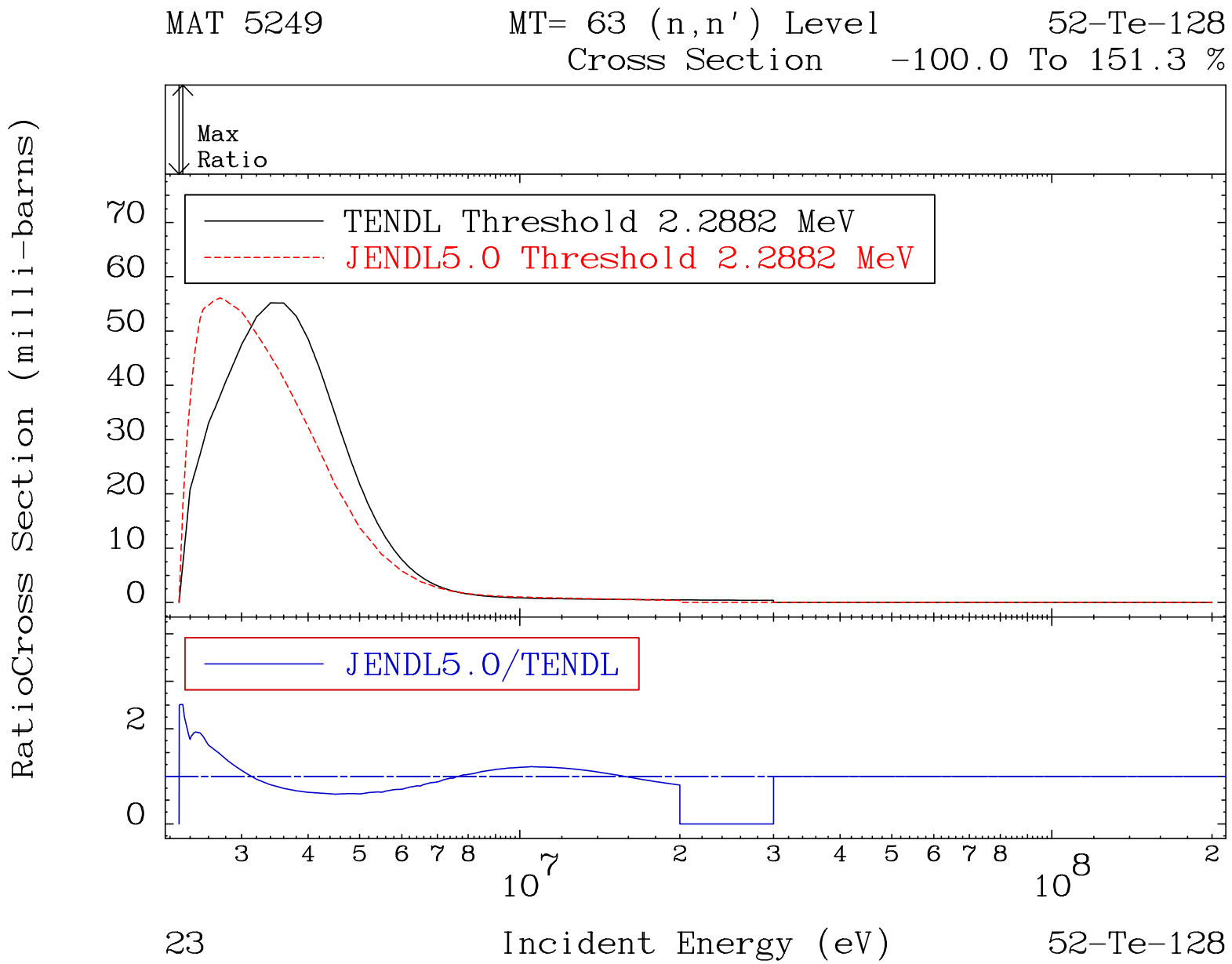

MAT 5249
MT= 58 (n,n') Level
52-Te-128
Cross Section
-100.0 To 67.89 %
Min Ratio
Max Ratio
TENDL Threshold 2.0438 MeV
JENDL5.0 Threshold 2.0438 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
2.0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
18
Incident Energy (eV)
52-Te-128

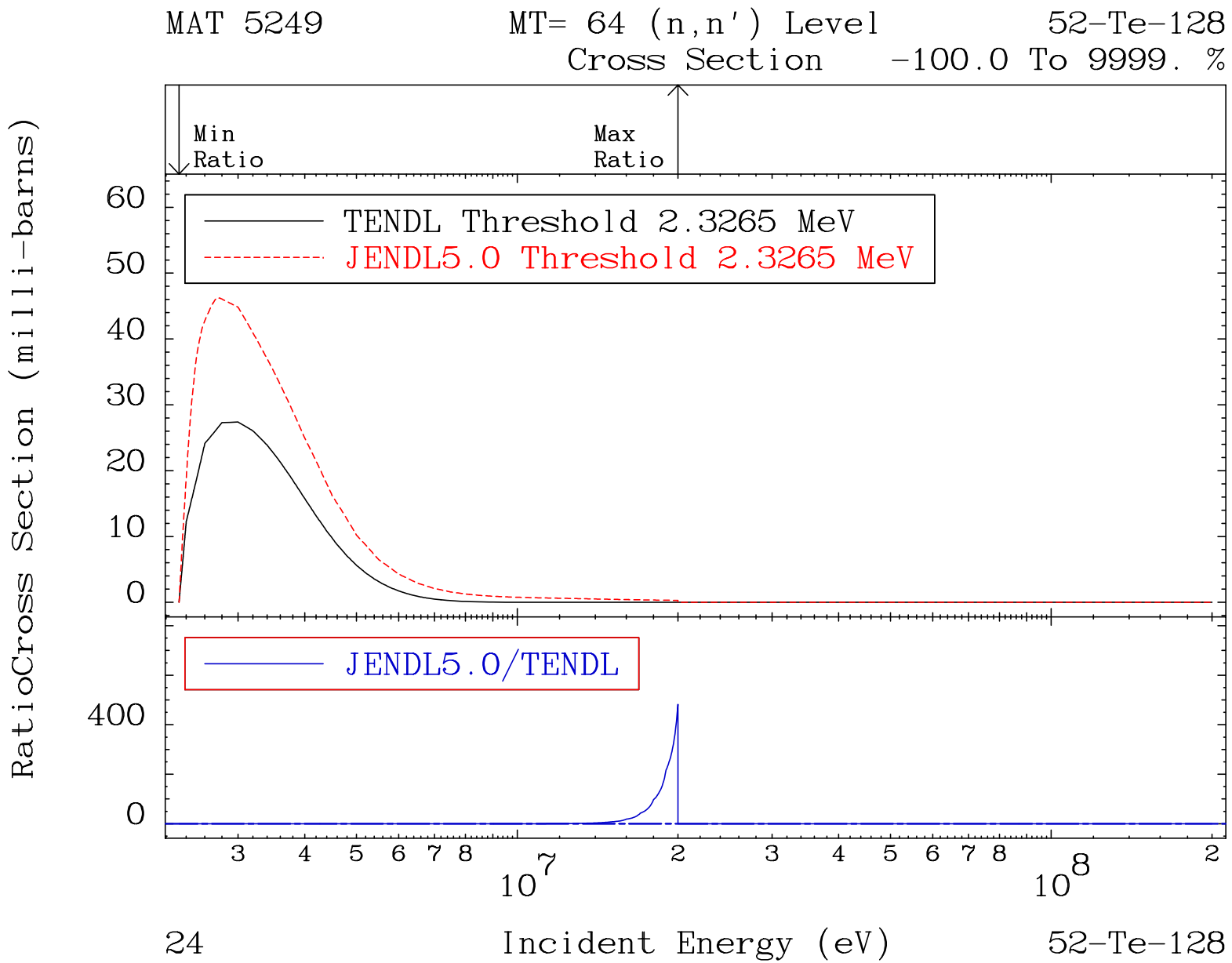

MAT 5249
MT= 59 (n,n') Level
52-Te-128
Cross Section
-100.0 To 153.0 %
Min Ratio
Max Ratio
TENDL Threshold 2.1501 MeV
JENDL5.0 Threshold 2.1501 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
2
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
19
Incident Energy (eV)
52-Te-128

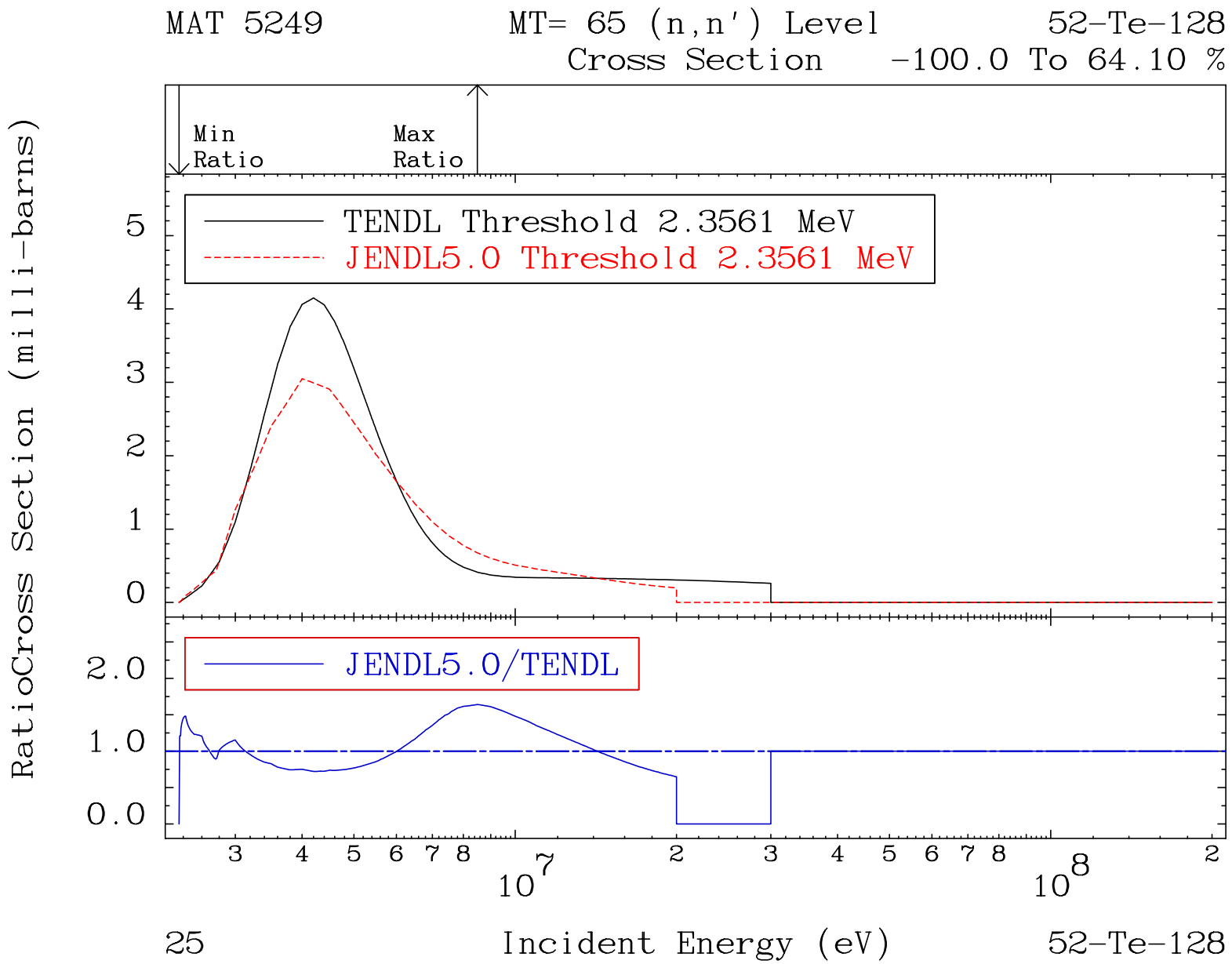

MAT 5249
MT= 60 (n,n') Level
52-Te-128
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.1806 MeV
JENDL5.0 Threshold 2.1806 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
80
40
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
20
Incident Energy (eV)
52-Te-128

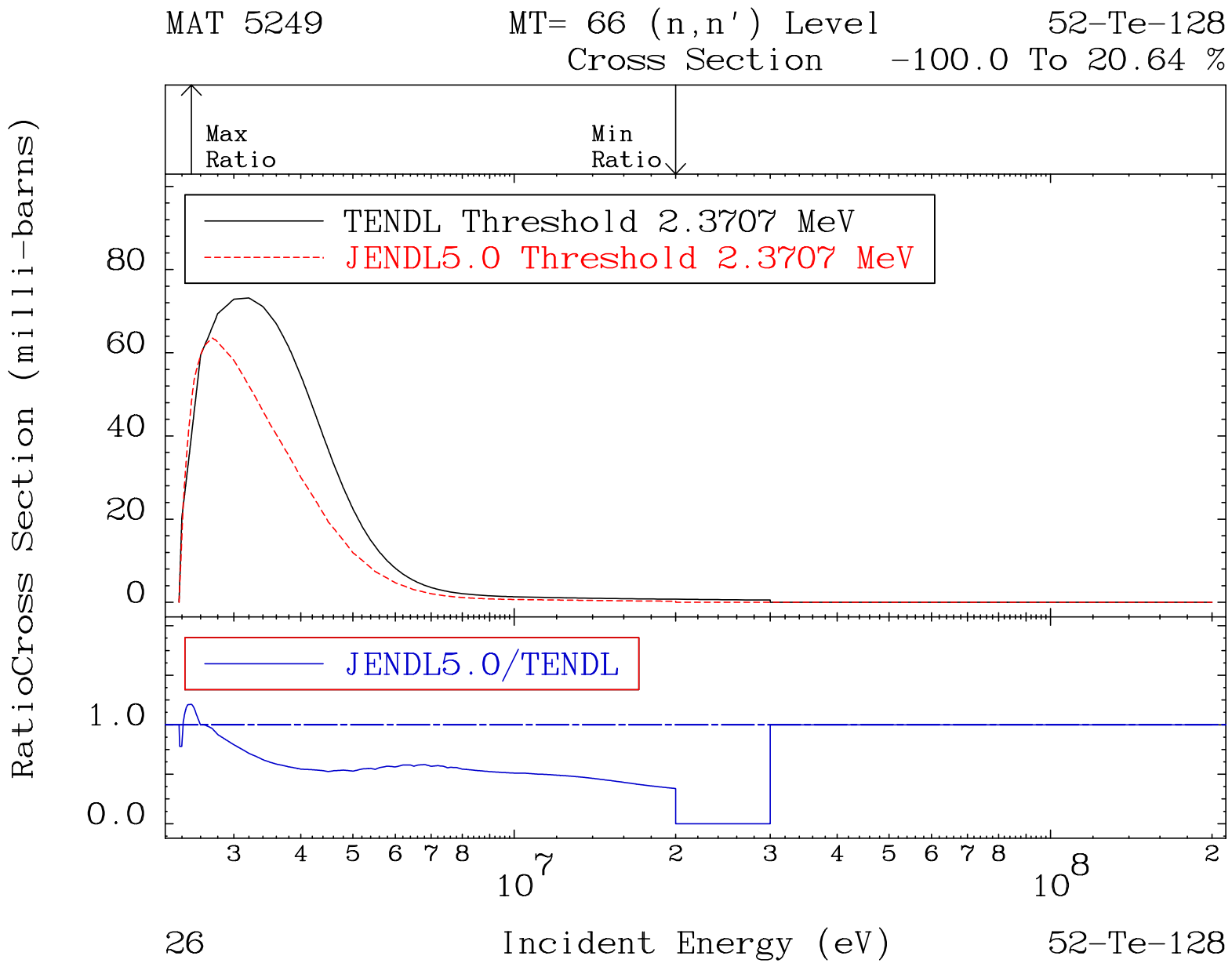

MAT 5249
MT= 61 (n,n') Level
52-Te-128
Cross Section
-100.0 To 131.1 %
Max
Ratio
120
100
80
60
40
20
0
TENDL Threshold 2.2108 MeV
JENDL5.0 Threshold 2.2108 MeV
JENDL5.0/TENDL
2
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
RatioCross Section (milli-barns)
21
Incident Energy (eV)
52-Te-128

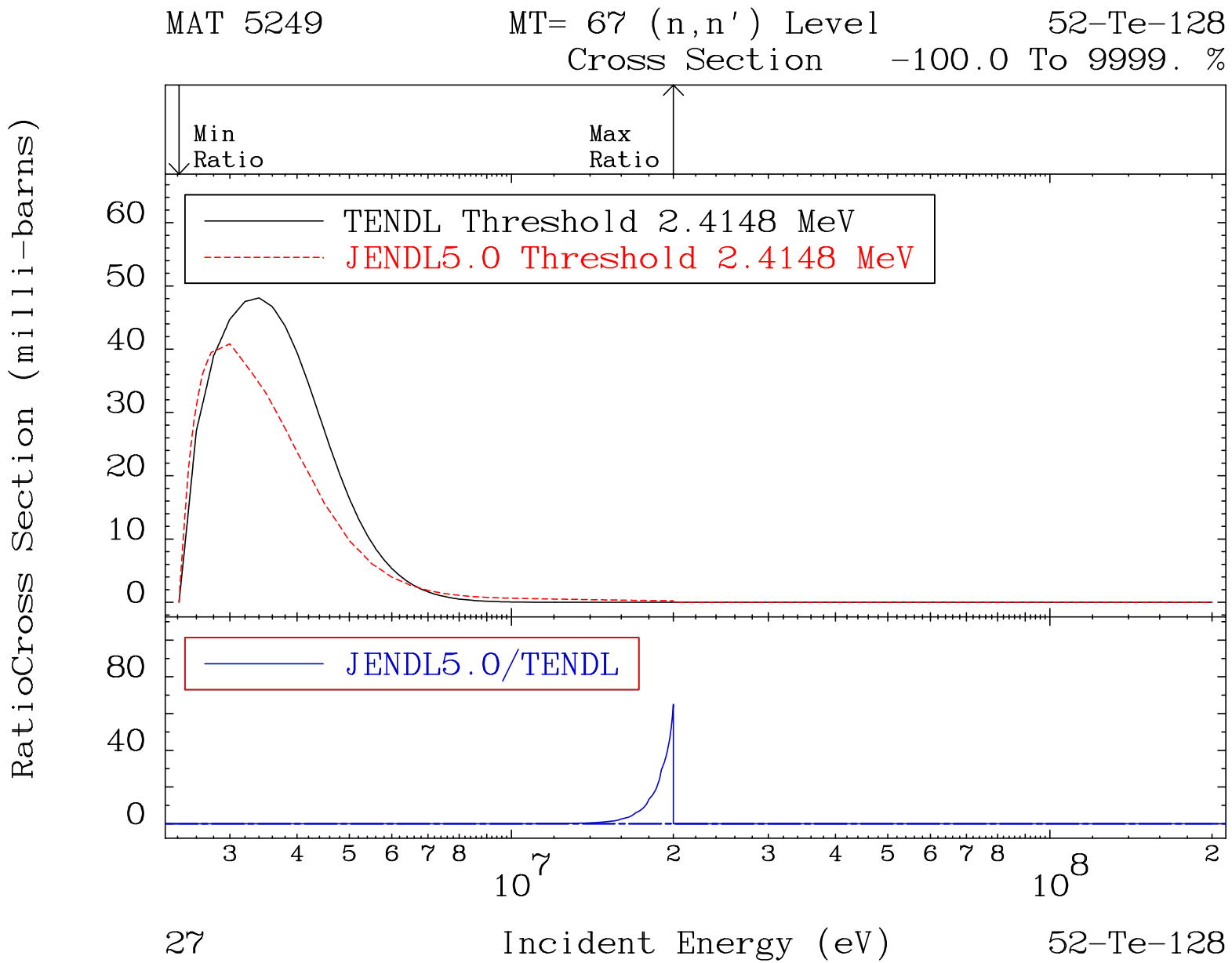

MAT 5249
MT= 62 (n,n') Level
52-Te-128
Cross Section
-100.0 To 37.03 %
Max Ratio
Min Ratio
TENDL Threshold 2.2354 MeV
JENDL5.0 Threshold 2.2354 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
2.0
1.0
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
22
Incident Energy (eV)
52-Te-128

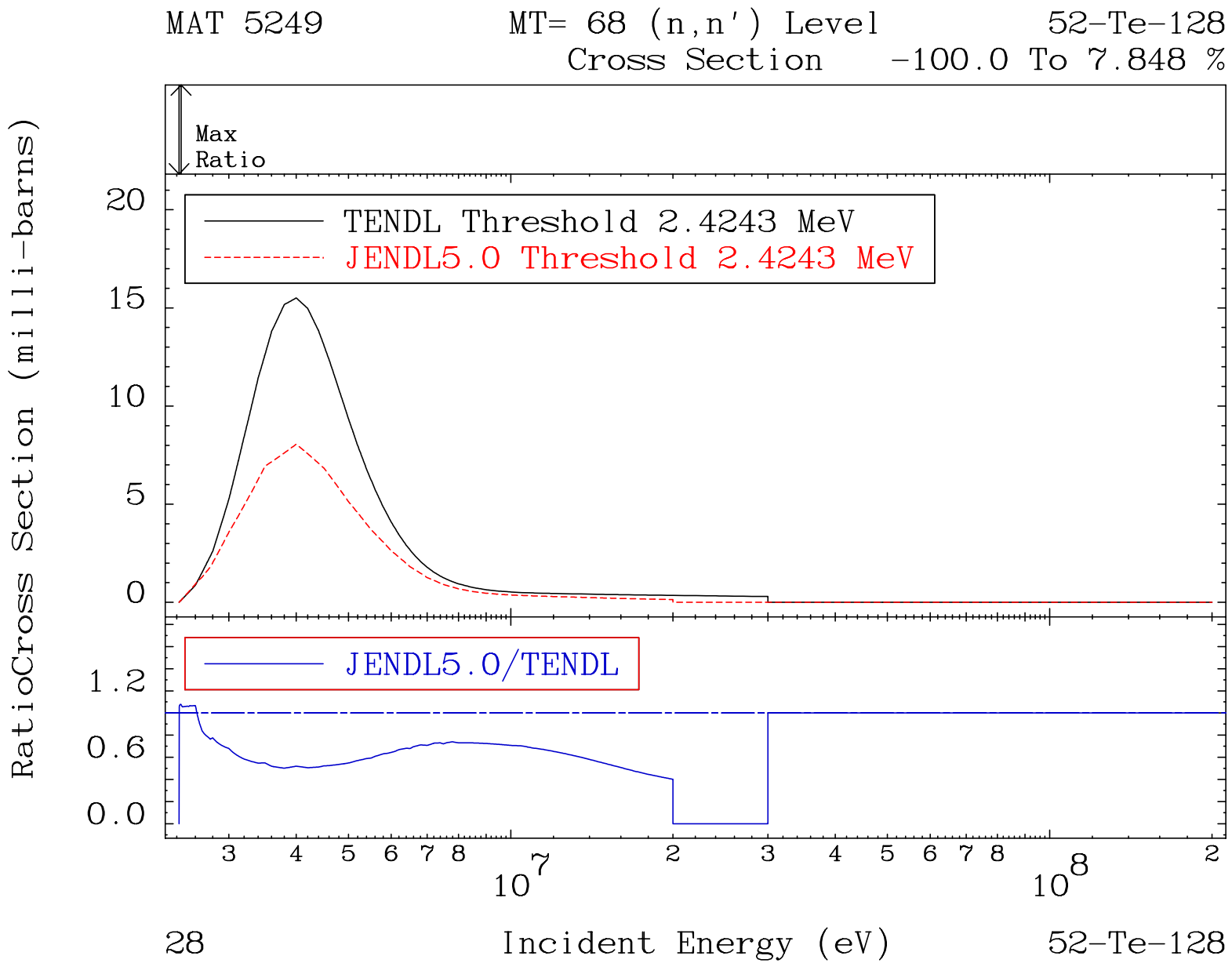

MAT 5249
MT= 63 (n,n') Level
52-Te-128
Cross Section
-100.0 To 151.3 %
Max
Ratio
TENDL Threshold 2.2882 MeV
JENDL5.0 Threshold 2.2882 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
2
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
23
Incident Energy (eV)
52-Te-128

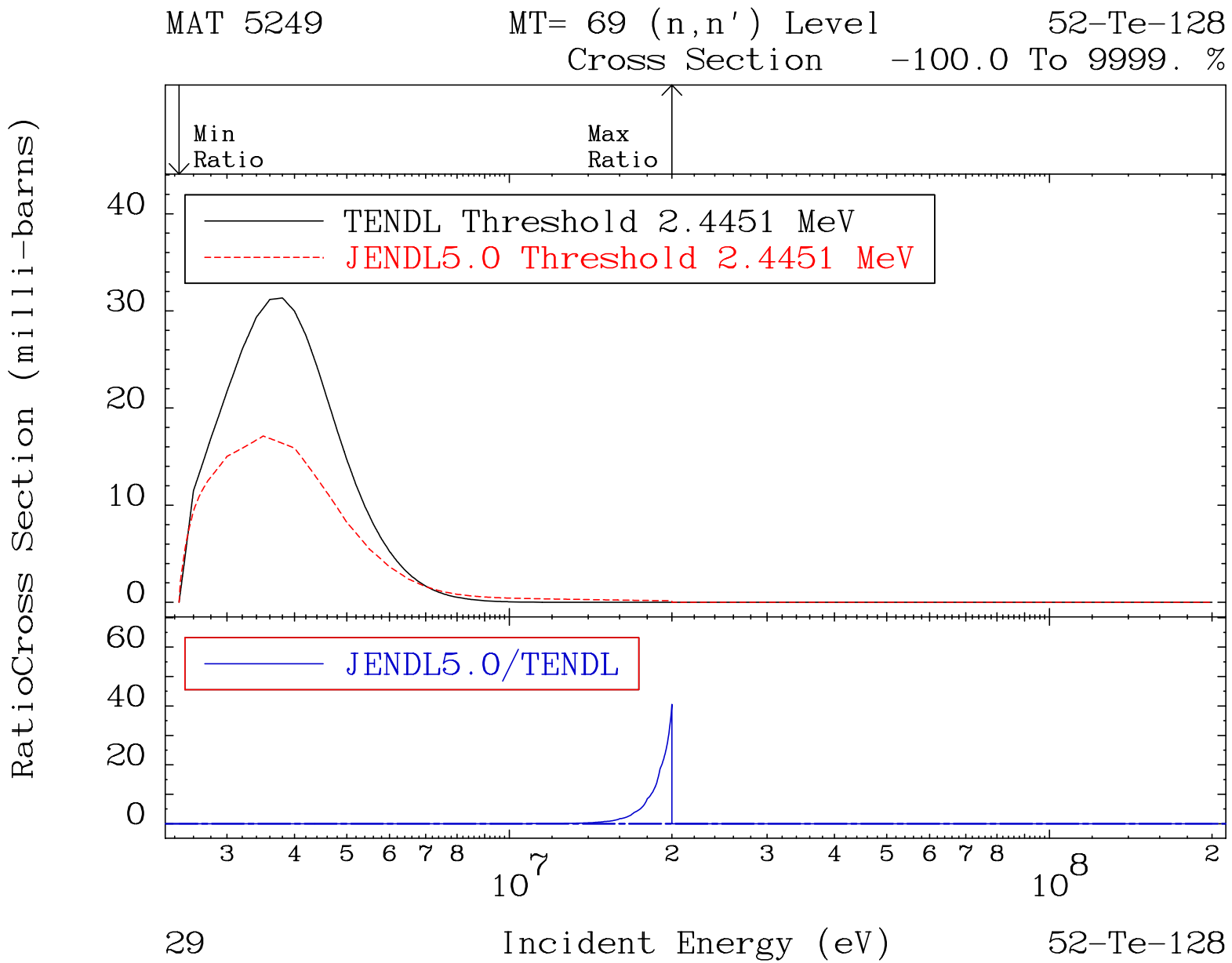

MAT 5249
MT= 64 (n,n') Level
52-Te-128
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.3265 MeV
JENDL5.0 Threshold 2.3265 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
400
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
24
Incident Energy (eV)
52-Te-128

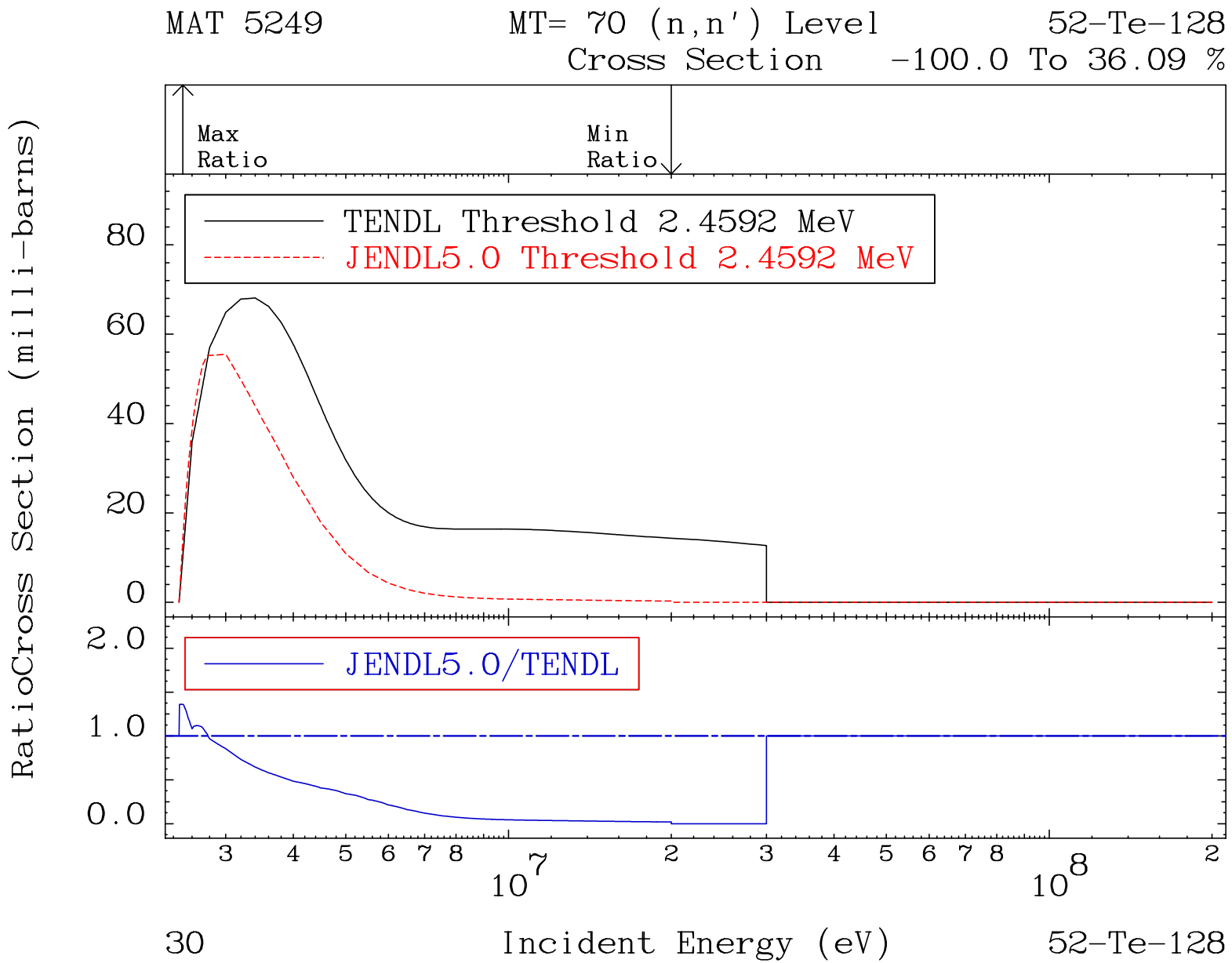

MAT 5249
MT= 65 (n,n') Level
52-Te-128
Cross Section
-100.0 To 64.10 %
Min Ratio
Max Ratio
TENDL Threshold 2.3561 MeV
JENDL5.0 Threshold 2.3561 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
25
52-Te-128

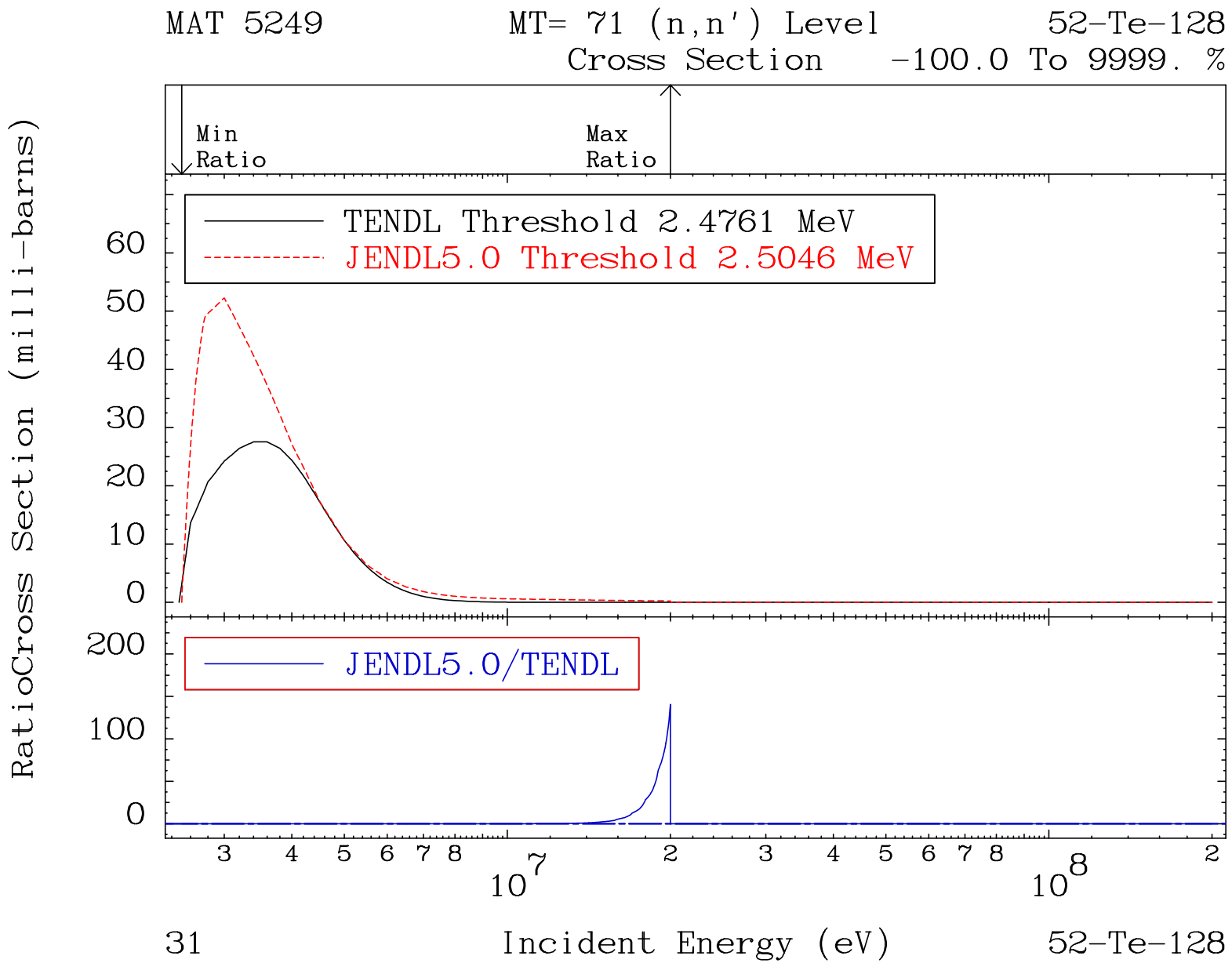

MAT 5249
MT= 66 (n,n') Level
52-Te-128
Cross Section
-100.0 To 20.64 %
Max Ratio
Min Ratio
TENDL Threshold 2.3707 MeV
JENDL5.0 Threshold 2.3707 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
1.0
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
26
Incident Energy (eV)
52-Te-128

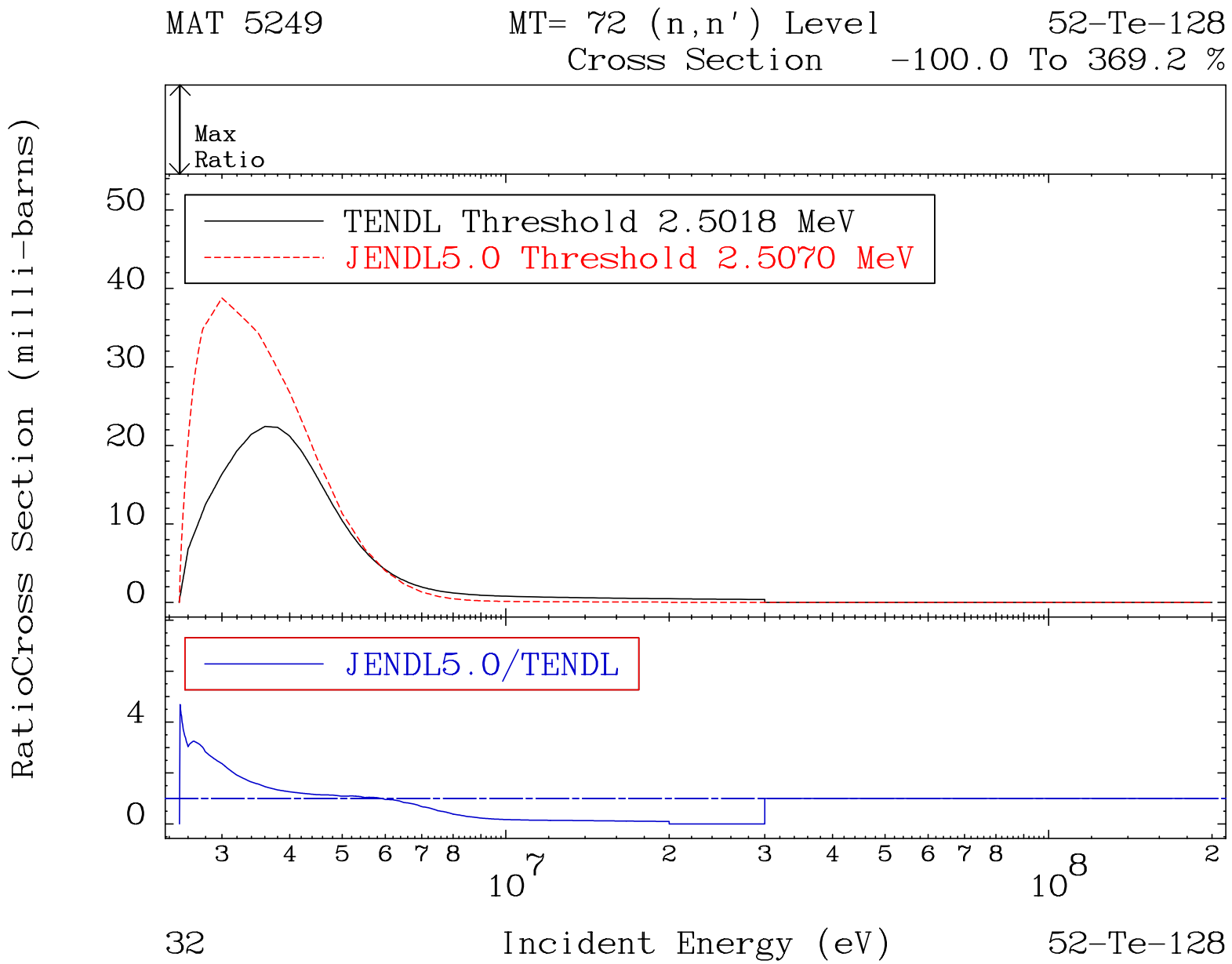

MAT 5249
MT= 67 (n,n') Level
52-Te-128
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.4148 MeV
JENDL5.0 Threshold 2.4148 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
27
52-Te-128

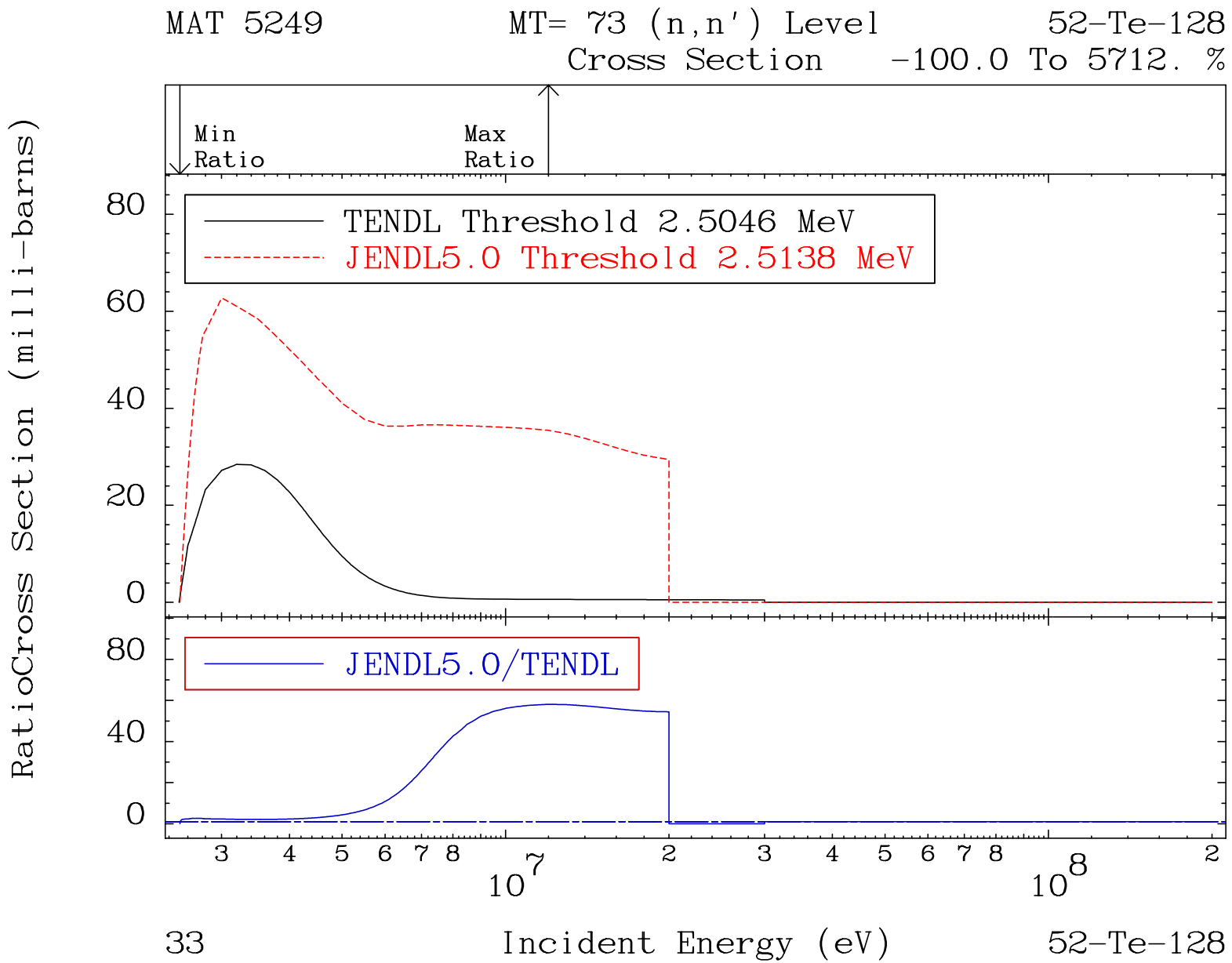

MAT 5249
MT= 68 (n,n') Level
52-Te-128
Cross Section
-100.0 To 7.848 %
Max
Ratio
TENDL Threshold 2.4243 MeV
JENDL5.0 Threshold 2.4243 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
1.2
0.6
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
28
Incident Energy (eV)
52-Te-128

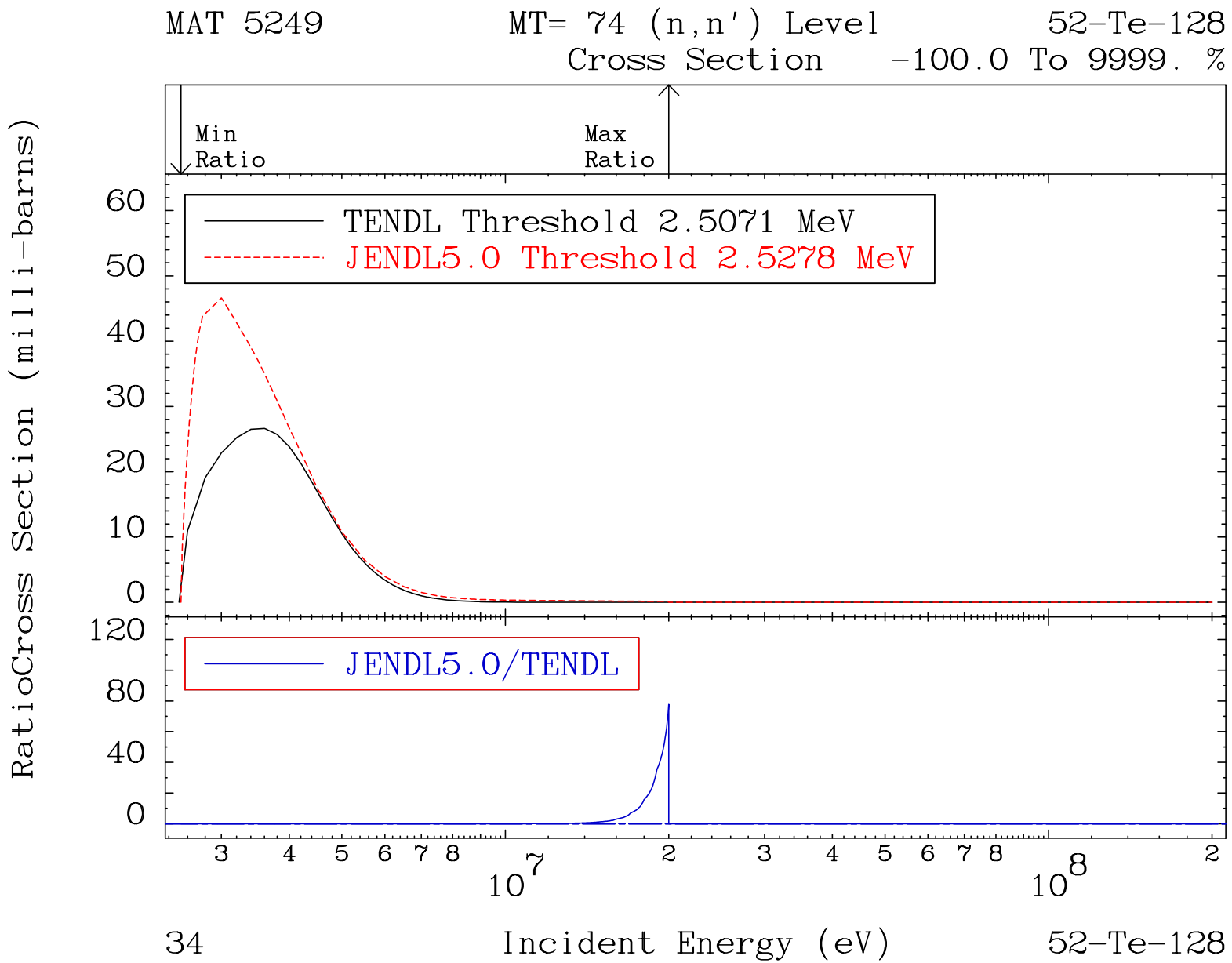

MAT 5249
MT= 69 (n,n') Level
52-Te-128
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.4451 MeV
JENDL5.0 Threshold 2.4451 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
29
52-Te-128

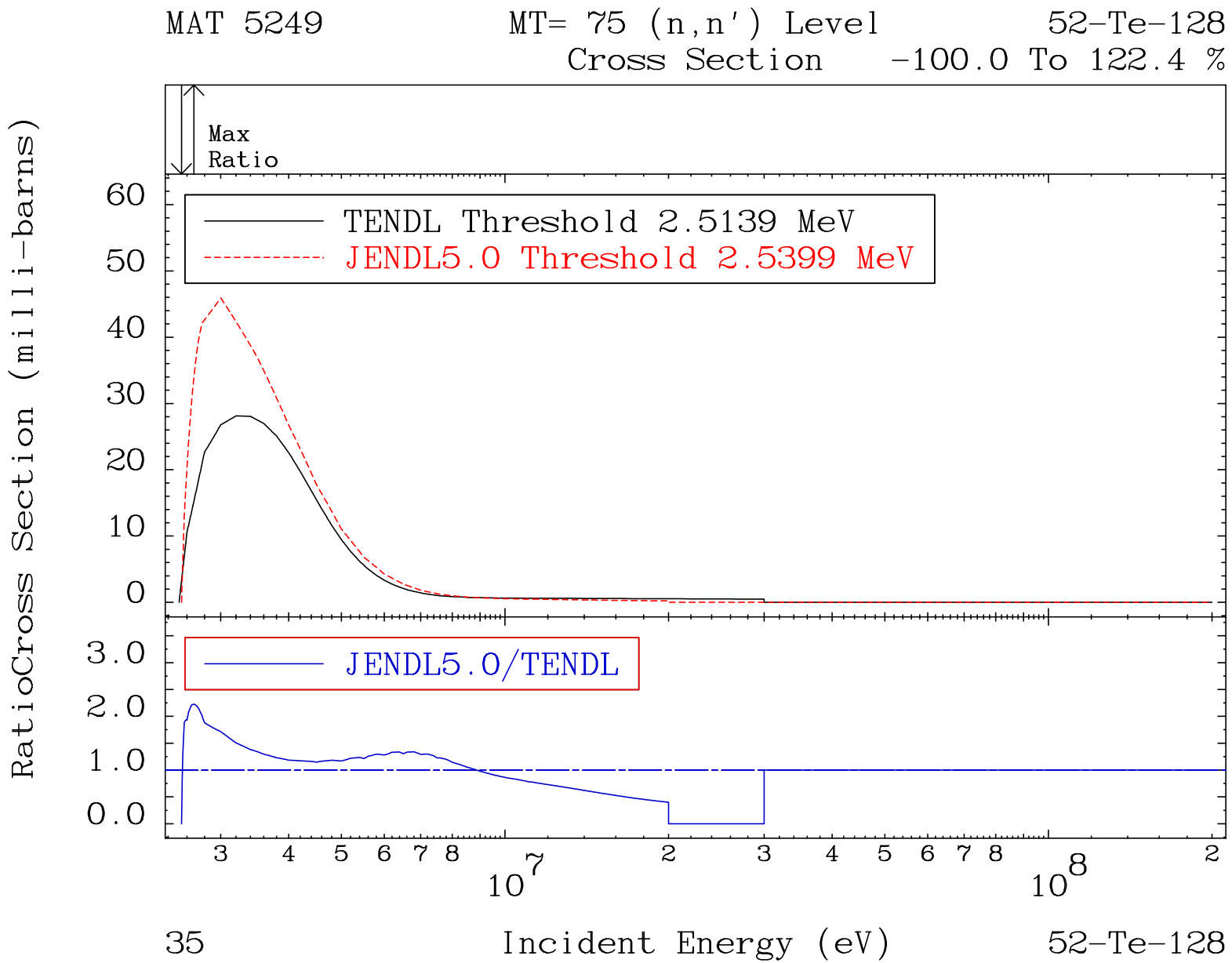

MAT 5249
MT= 70 (n,n') Level
52-Te-128
Cross Section
-100.0 To 36.09 %
Max Ratio
Min Ratio
TENDL Threshold 2.4592 MeV
JENDL5.0 Threshold 2.4592 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
2.0
1.0
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
30
Incident Energy (eV)
52-Te-128

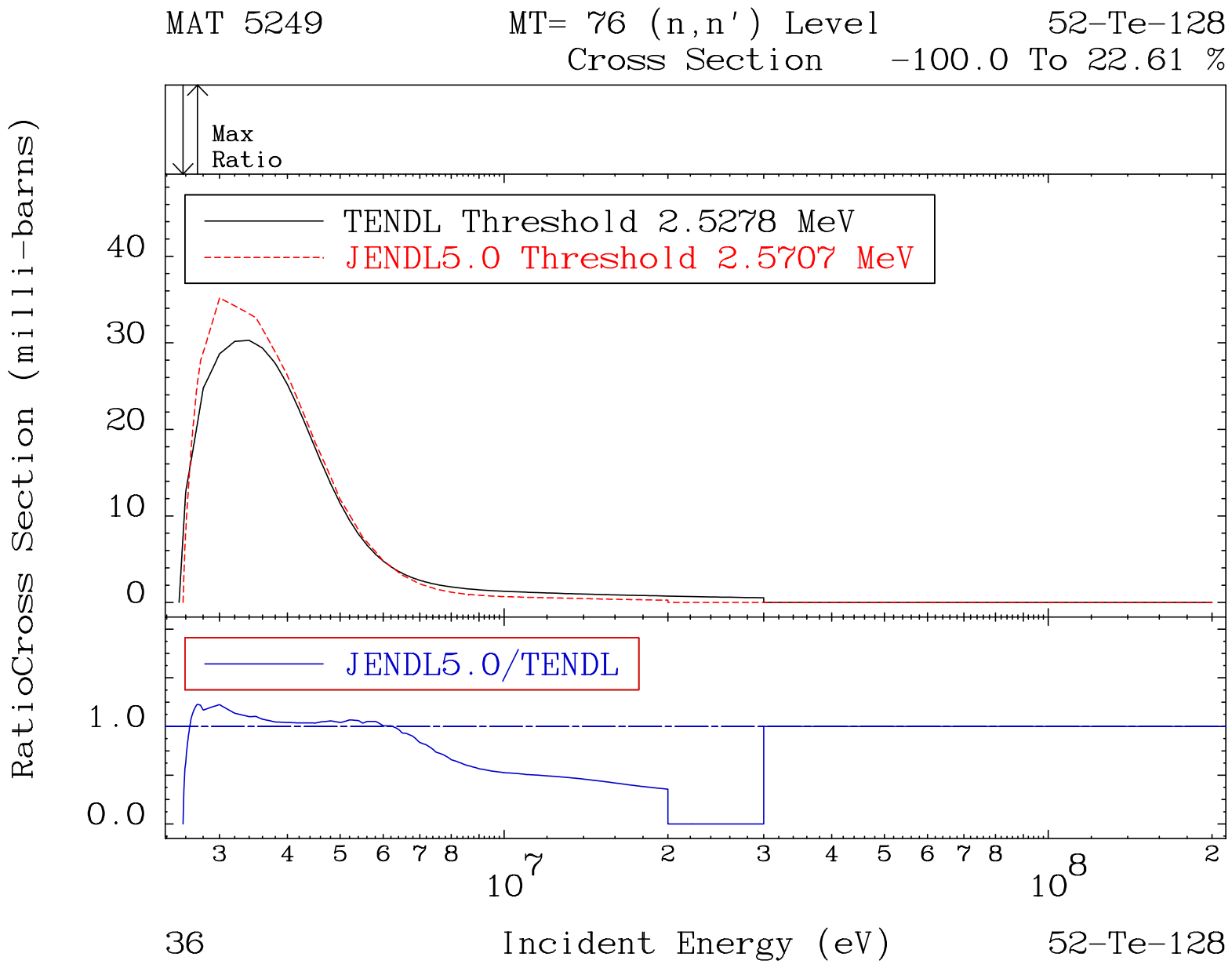

MAT 5249
MT= 71 (n,n') Level
52-Te-128
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.4761 MeV
JENDL5.0 Threshold 2.5046 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
200
100
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
31
Incident Energy (eV)
52-Te-128

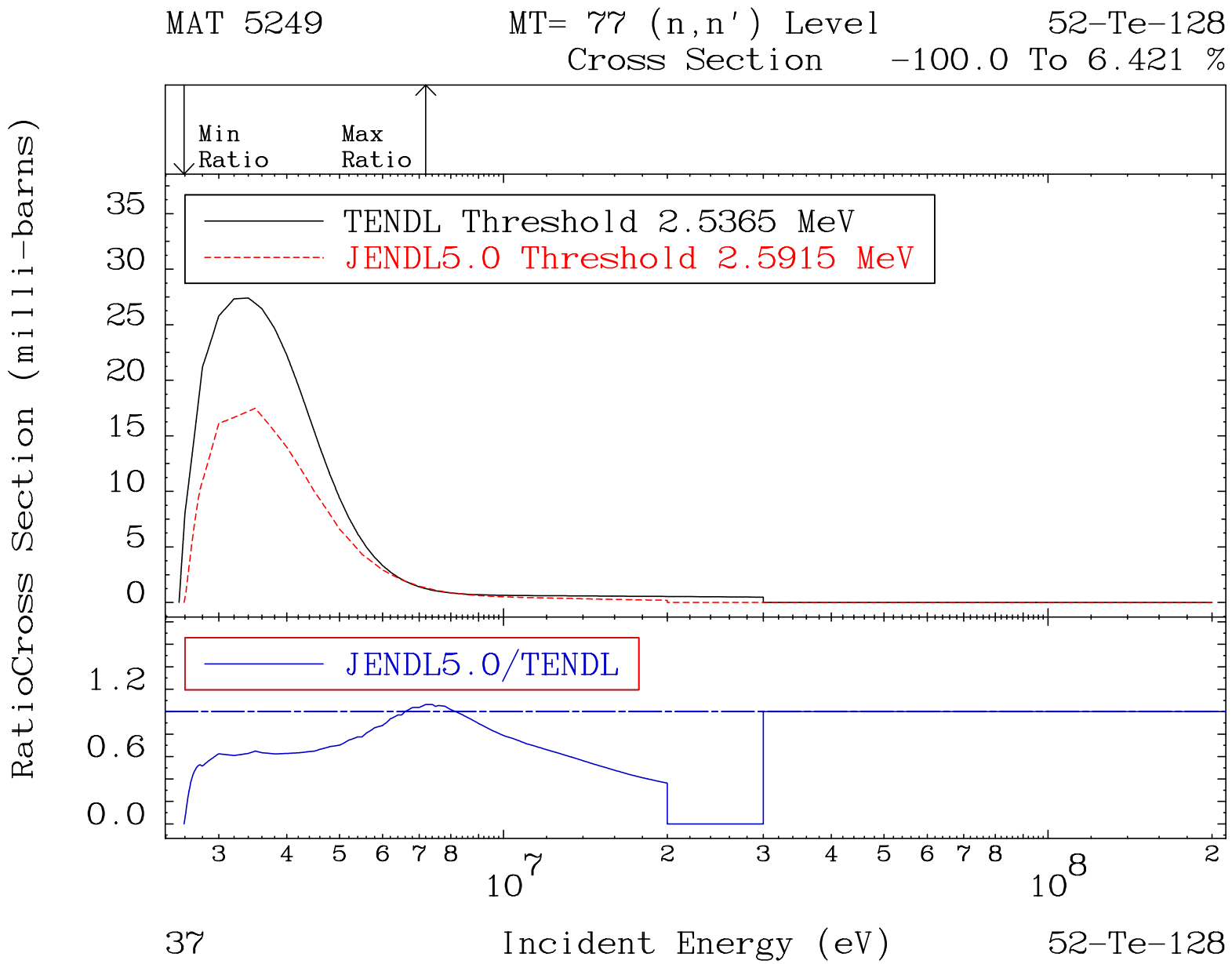

MAT 5249
MT= 72 (n,n') Level
52-Te-128
Cross Section
-100.0 To 369.2 %
Max
Ratio
TENDL Threshold 2.5018 MeV
JENDL5.0 Threshold 2.5070 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
4
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
32
Incident Energy (eV)
52-Te-128

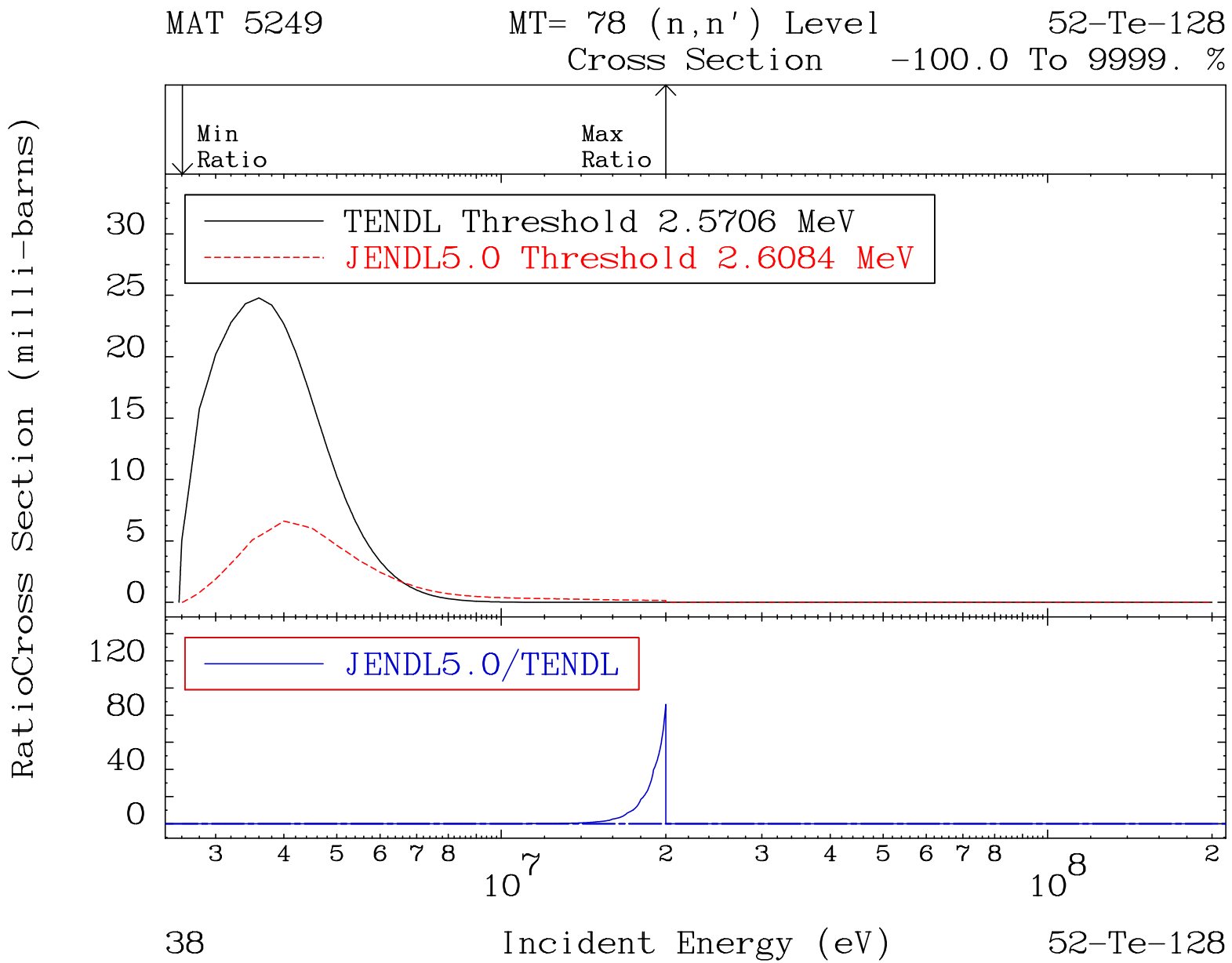

MAT 5249
MT= 73 (n,n') Level
52-Te-128
Cross Section
-100.0 To 5712. %
Min Ratio
Max Ratio
TENDL Threshold 2.5046 MeV
JENDL5.0 Threshold 2.5138 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
80
40
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
33
Incident Energy (eV)
52-Te-128

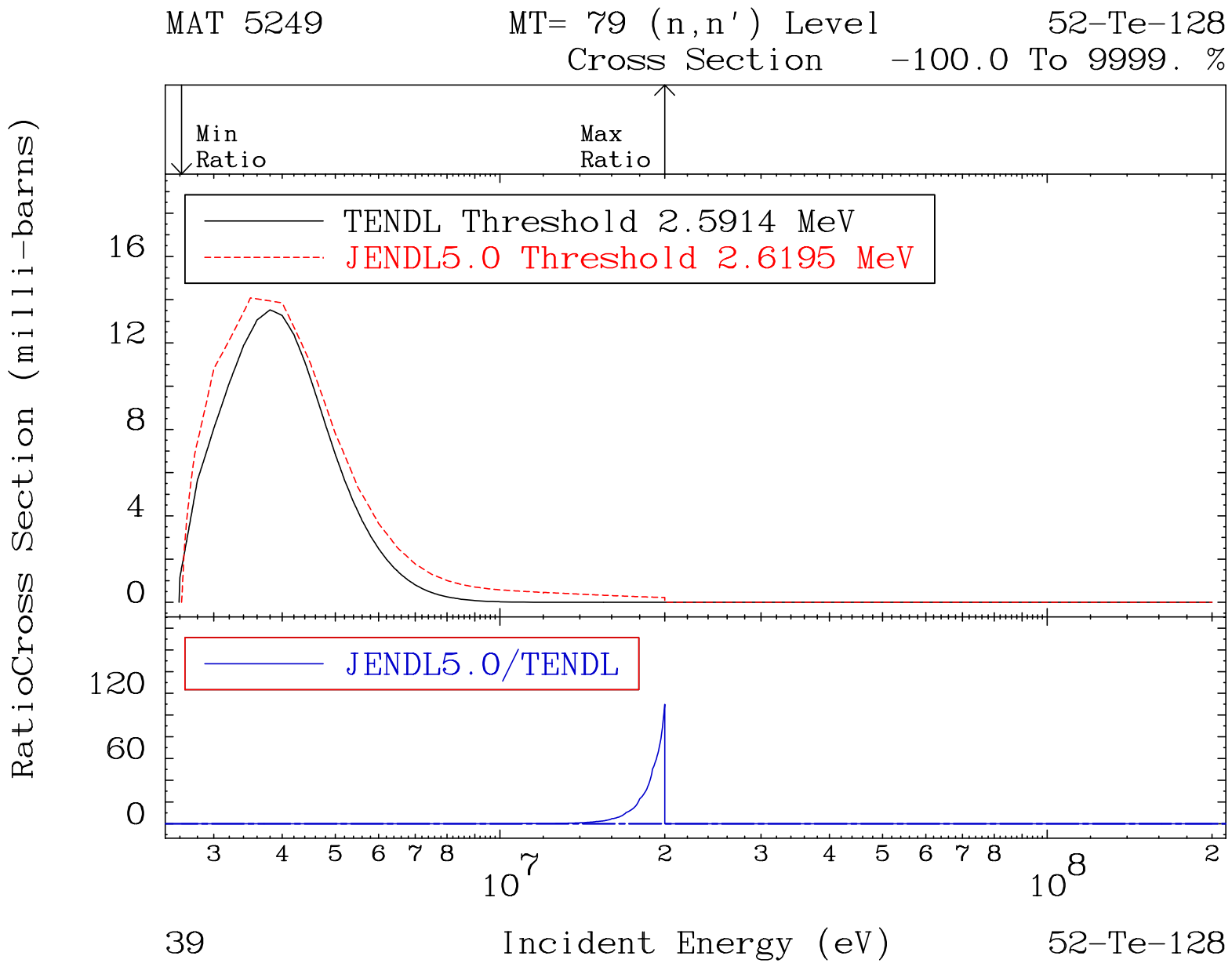

MAT 5249
MT= 74 (n,n') Level
52-Te-128
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.5071 MeV
JENDL5.0 Threshold 2.5278 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
34
52-Te-128

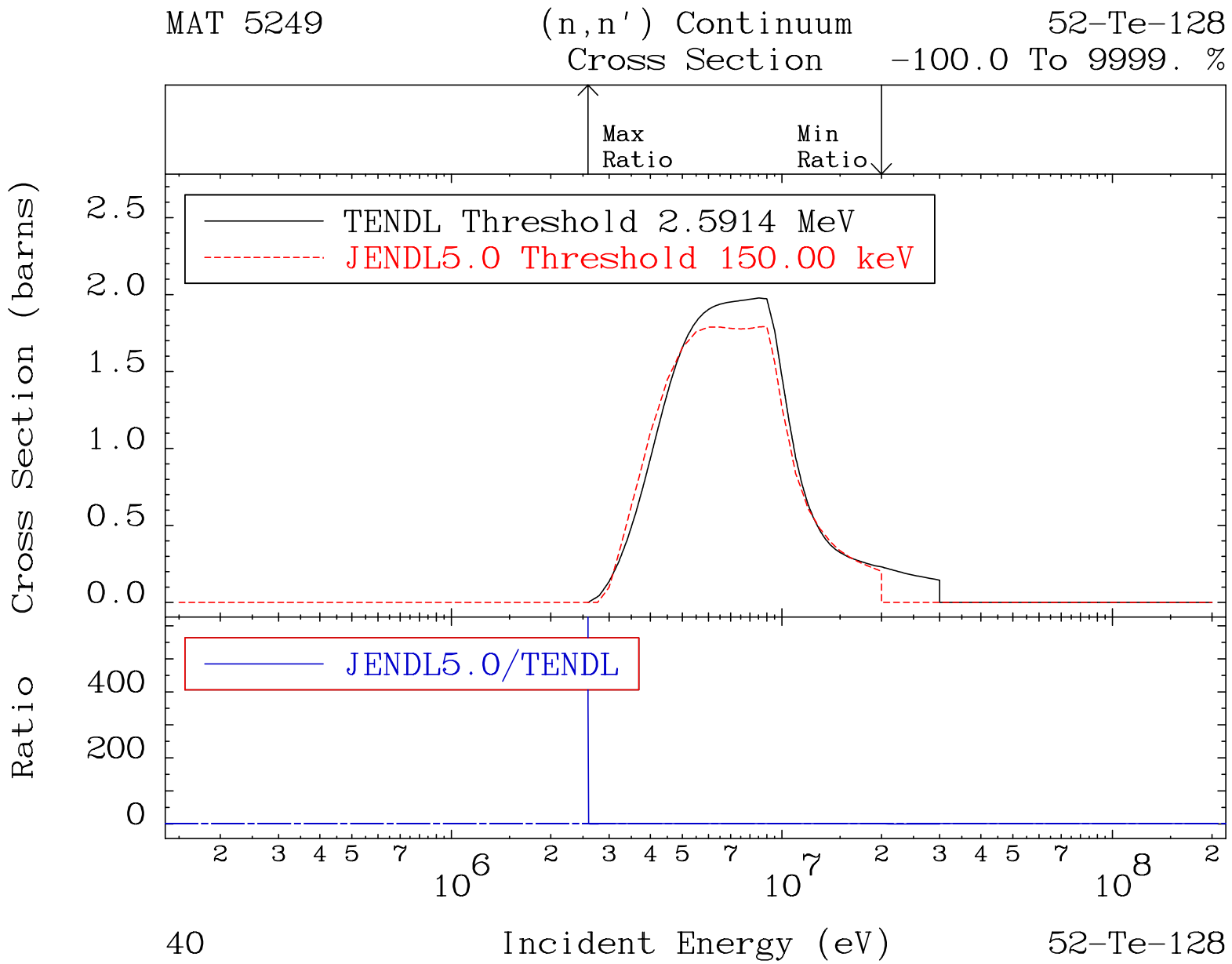

MAT 5249
MT= 75 (n,n') Level
52-Te-128
Cross Section
-100.0 To 122.4 %
Max
Ratio
TENDL Threshold 2.5139 MeV
JENDL5.0 Threshold 2.5399 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
3.0
2.0
1.0
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
35
Incident Energy (eV)
52-Te-128

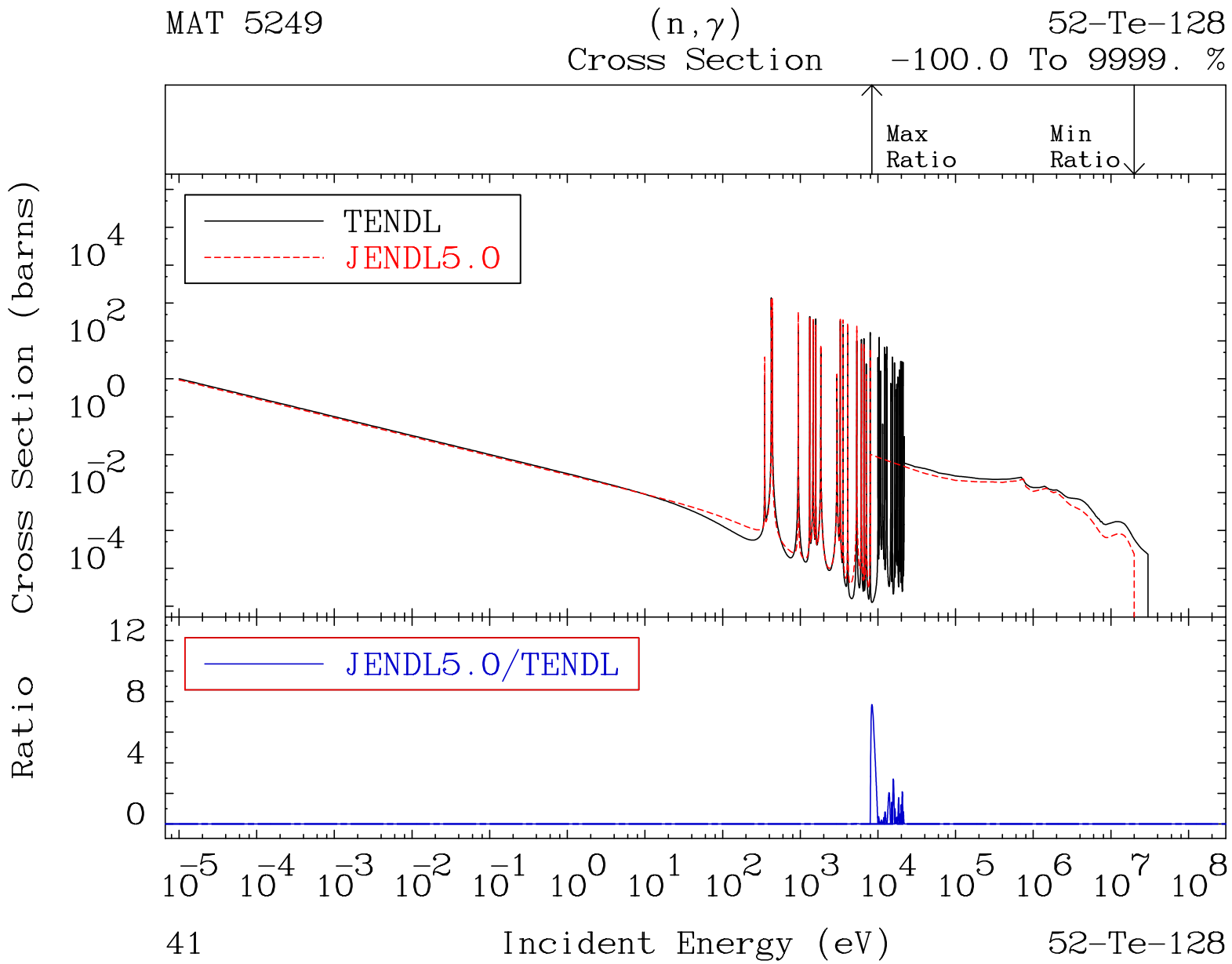

MAT 5249
MT= 76 (n,n') Level
52-Te-128
Cross Section
-100.0 To 22.61 %
Max
Ratio
TENDL Threshold 2.5278 MeV
JENDL5.0 Threshold 2.5707 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
1.0
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
36
Incident Energy (eV)
52-Te-128

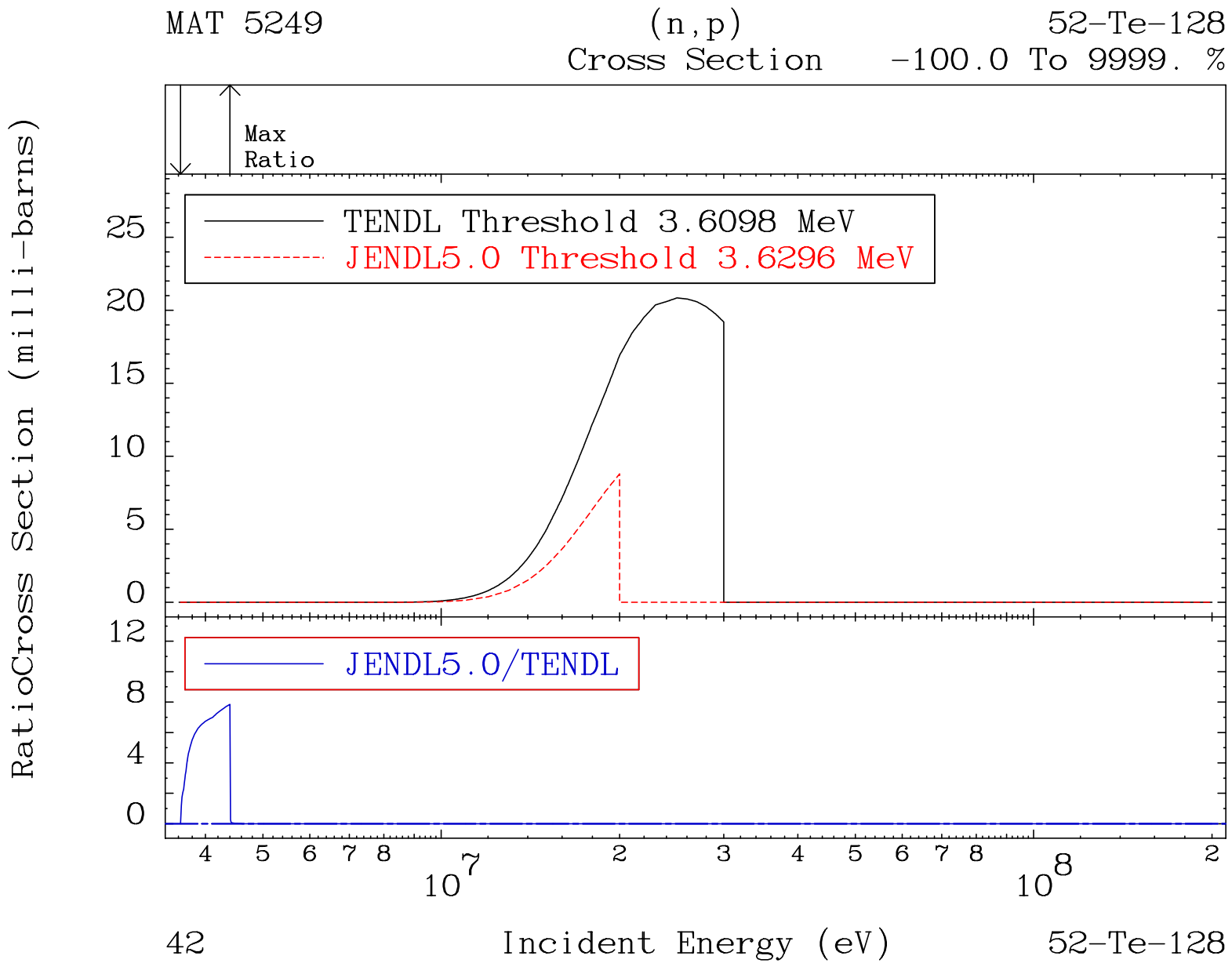

MAT 5249
MT= 77 (n,n') Level
52-Te-128
Cross Section
-100.0 To 6.421 %
Min Ratio
Max Ratio
TENDL Threshold 2.5365 MeV
JENDL5.0 Threshold 2.5915 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
35
30
25
20
15
10
5
0
1.2
0.6
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
37
Incident Energy (eV)
52-Te-128

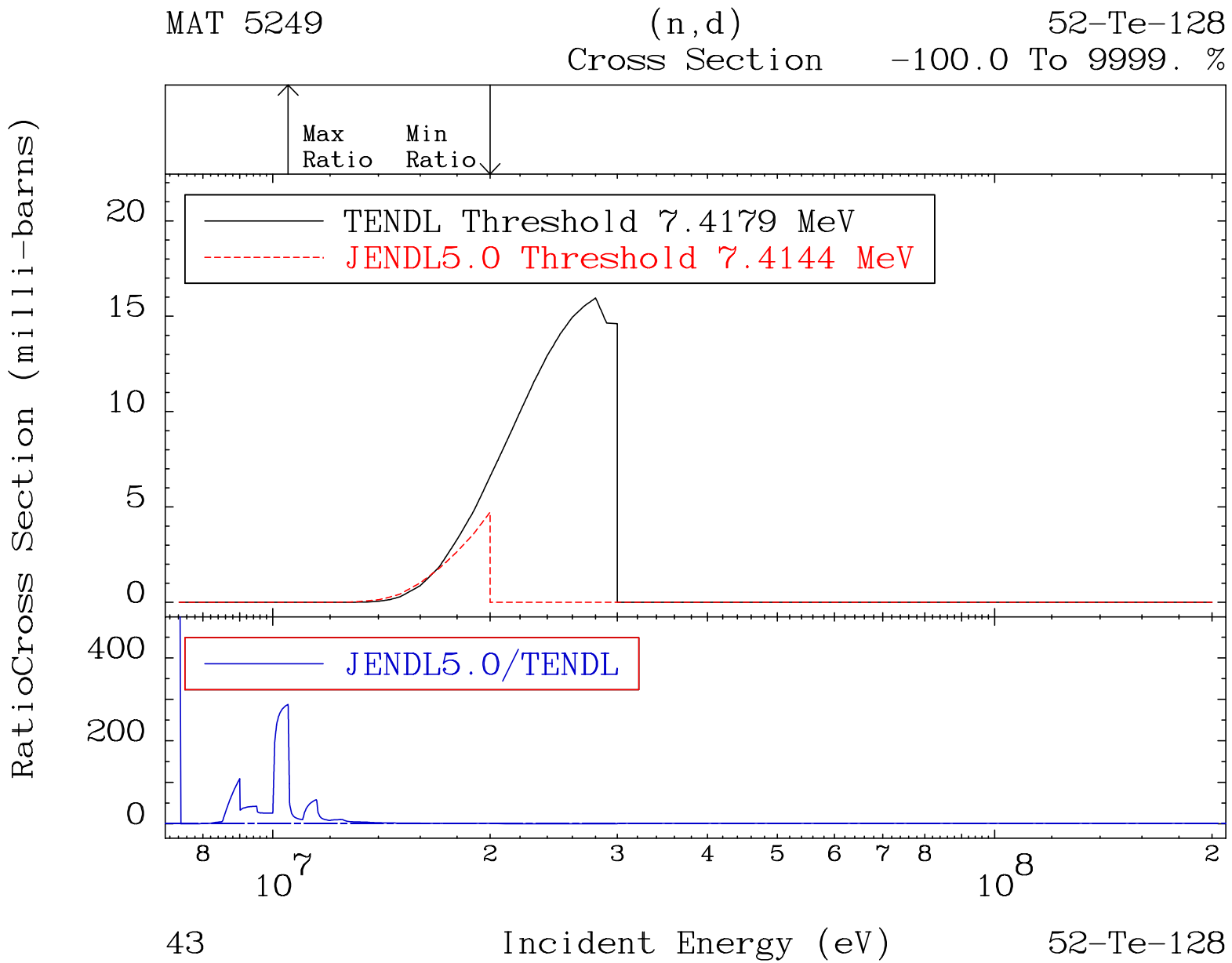

MAT 5249
MT= 78 (n,n') Level
52-Te-128
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.5706 MeV
JENDL5.0 Threshold 2.6084 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
120
80
40
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
38
Incident Energy (eV)
52-Te-128

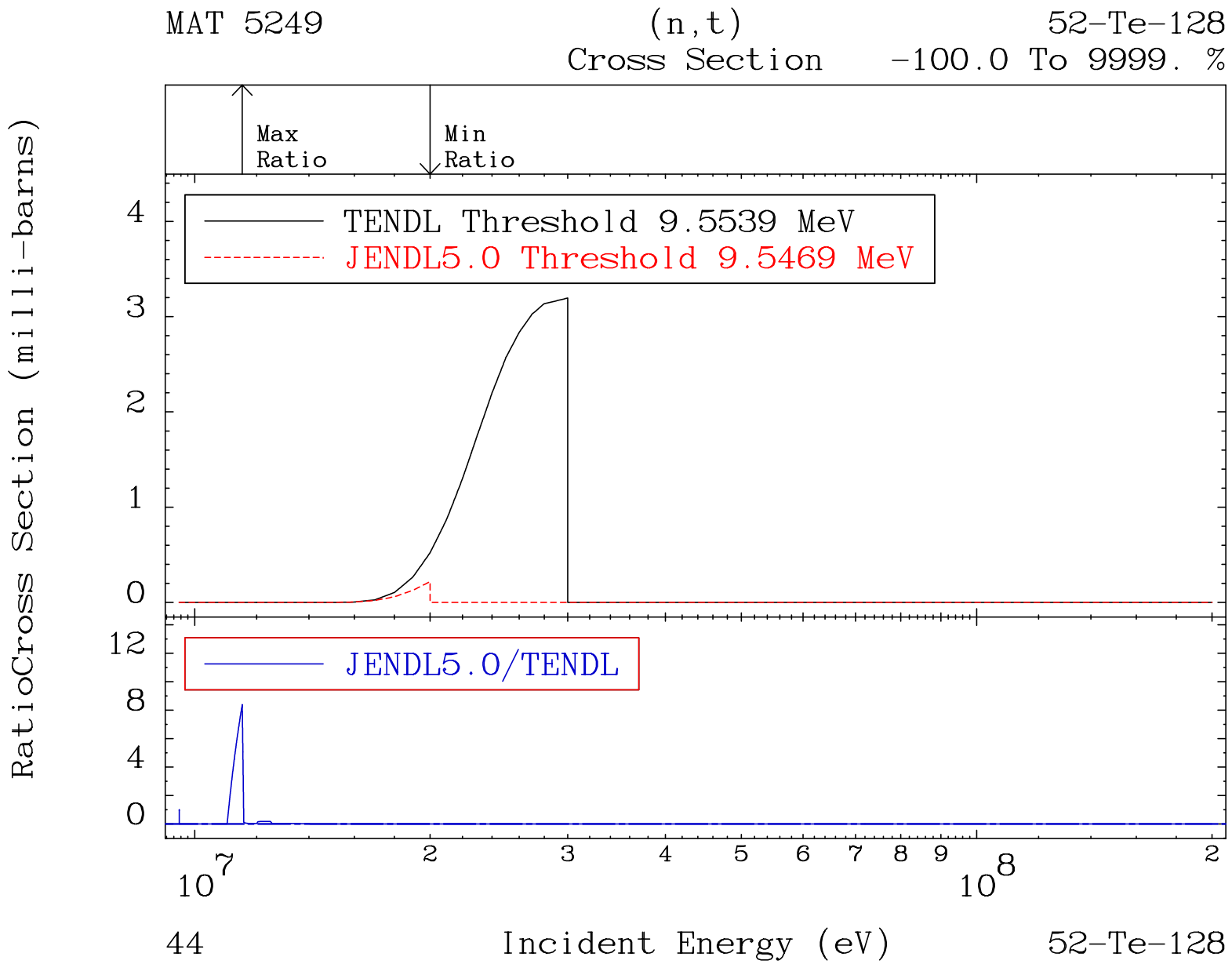

MAT 5249
MT= 79 (n,n') Level
52-Te-128
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.5914 MeV
JENDL5.0 Threshold 2.6195 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
120
60
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
39
Incident Energy (eV)
52-Te-128

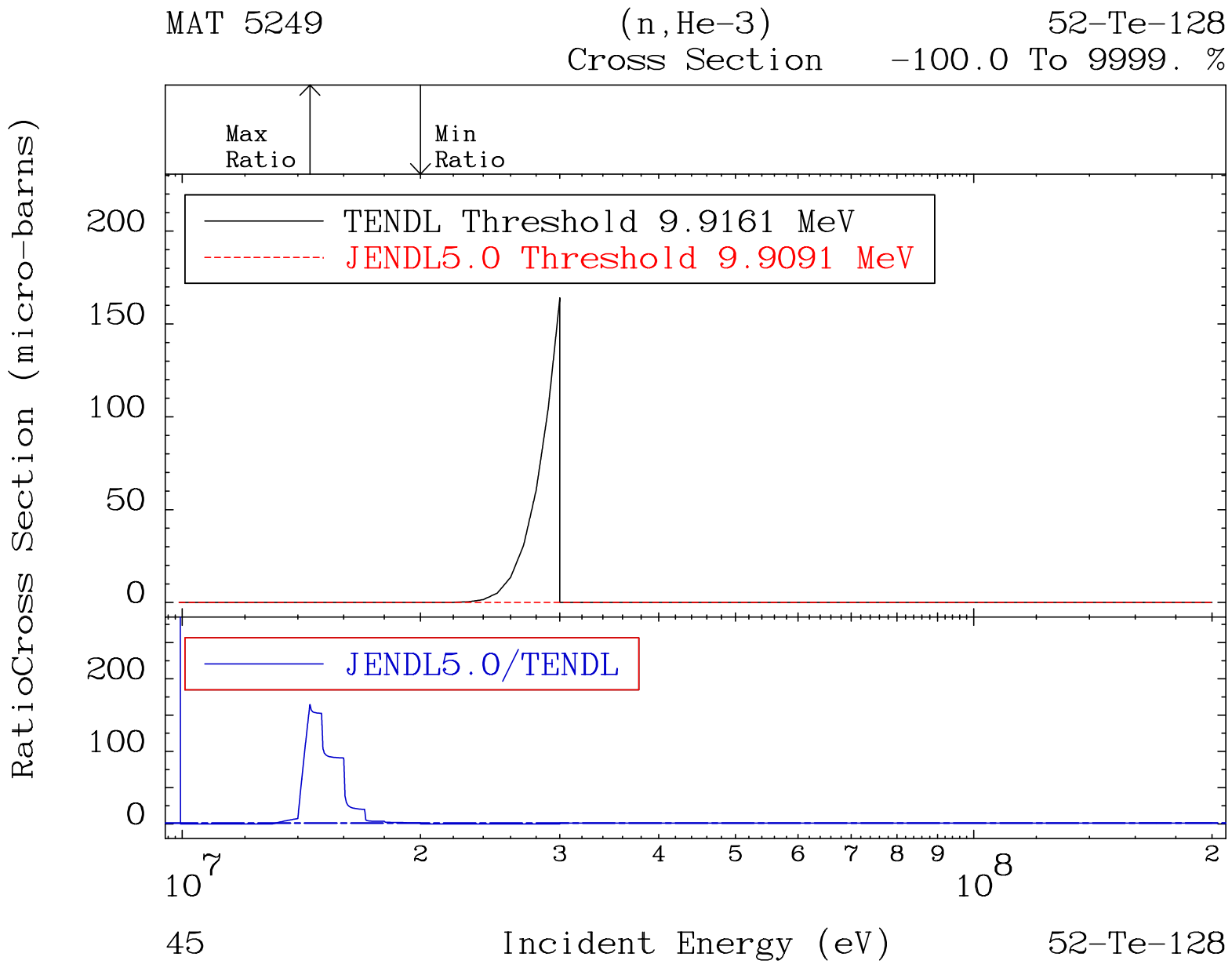

MAT 5249
(n,n') Continuum
Cross Section
52-Te-128
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.5914 MeV
JENDL5.0 Threshold 150.00 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
2.5
2.0
1.5
1.0
0.5
0.0
400
200
0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
40
Incident Energy (eV)
52-Te-128

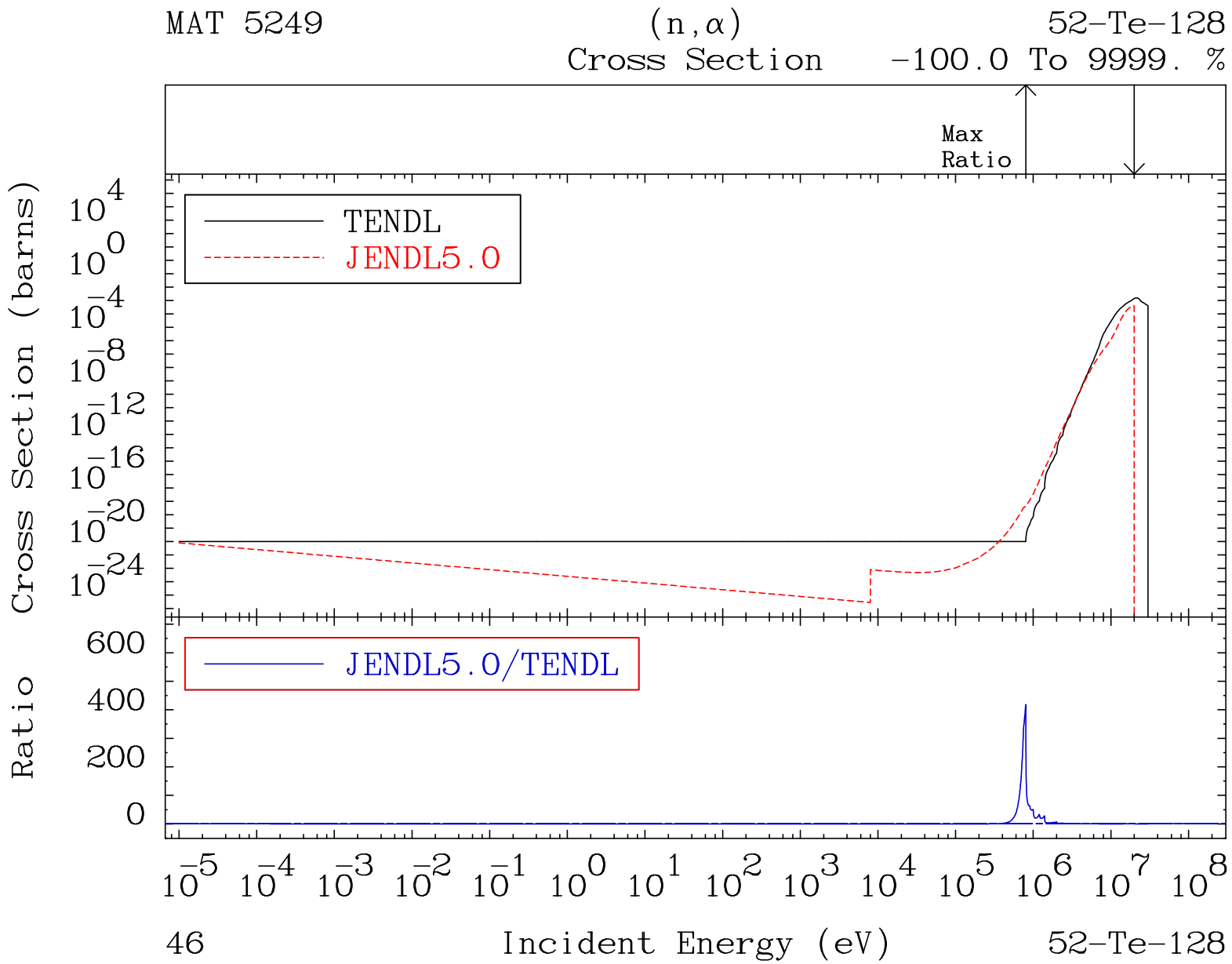

MAT 5249
(n,γ)
Cross Section
52-Te-128
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
41
52-Te-128

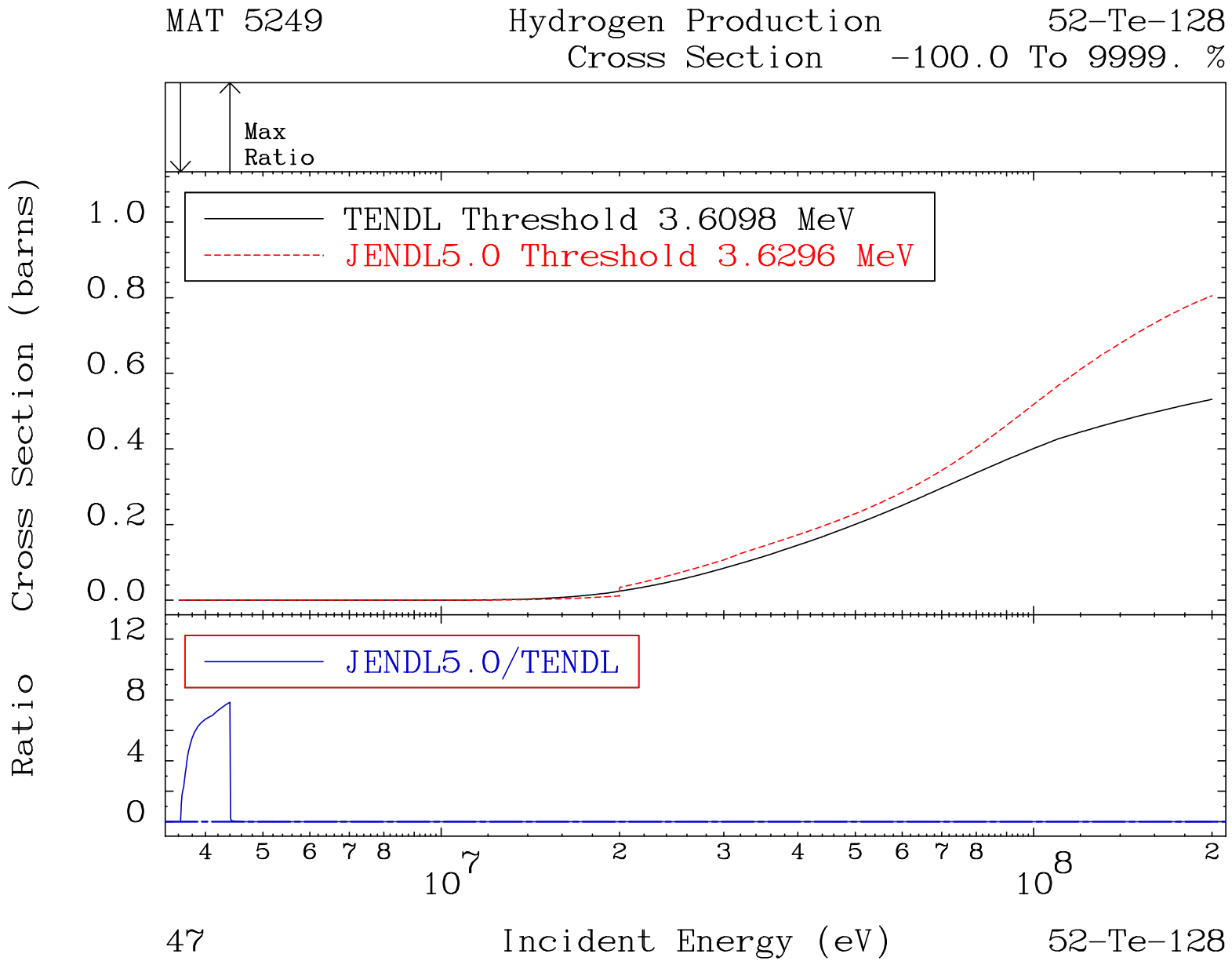

MAT 5249
(n,p)
52-Te-128
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 3.6098 MeV
JENDL5.0 Threshold 3.6296 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
12
8
4
0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
42
Incident Energy (eV)
52-Te-128

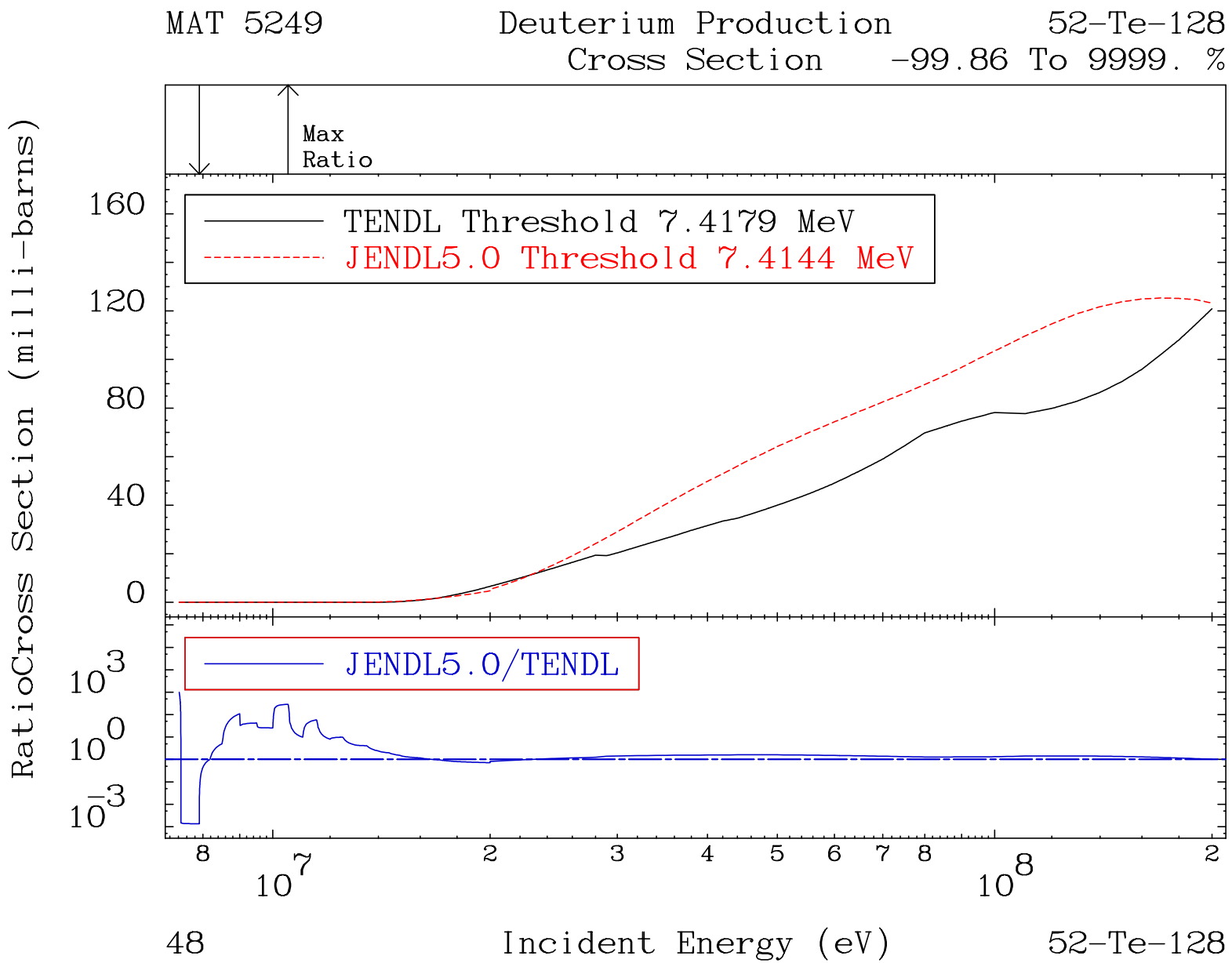

MAT 5249
(n,d)
52-Te-128
Cross Section
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 7.4179 MeV
JENDL5.0 Threshold 7.4144 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
400
200
0
8
10^7
2
3
4
5
6
7
8
10^8
2
43
Incident Energy (eV)
52-Te-128

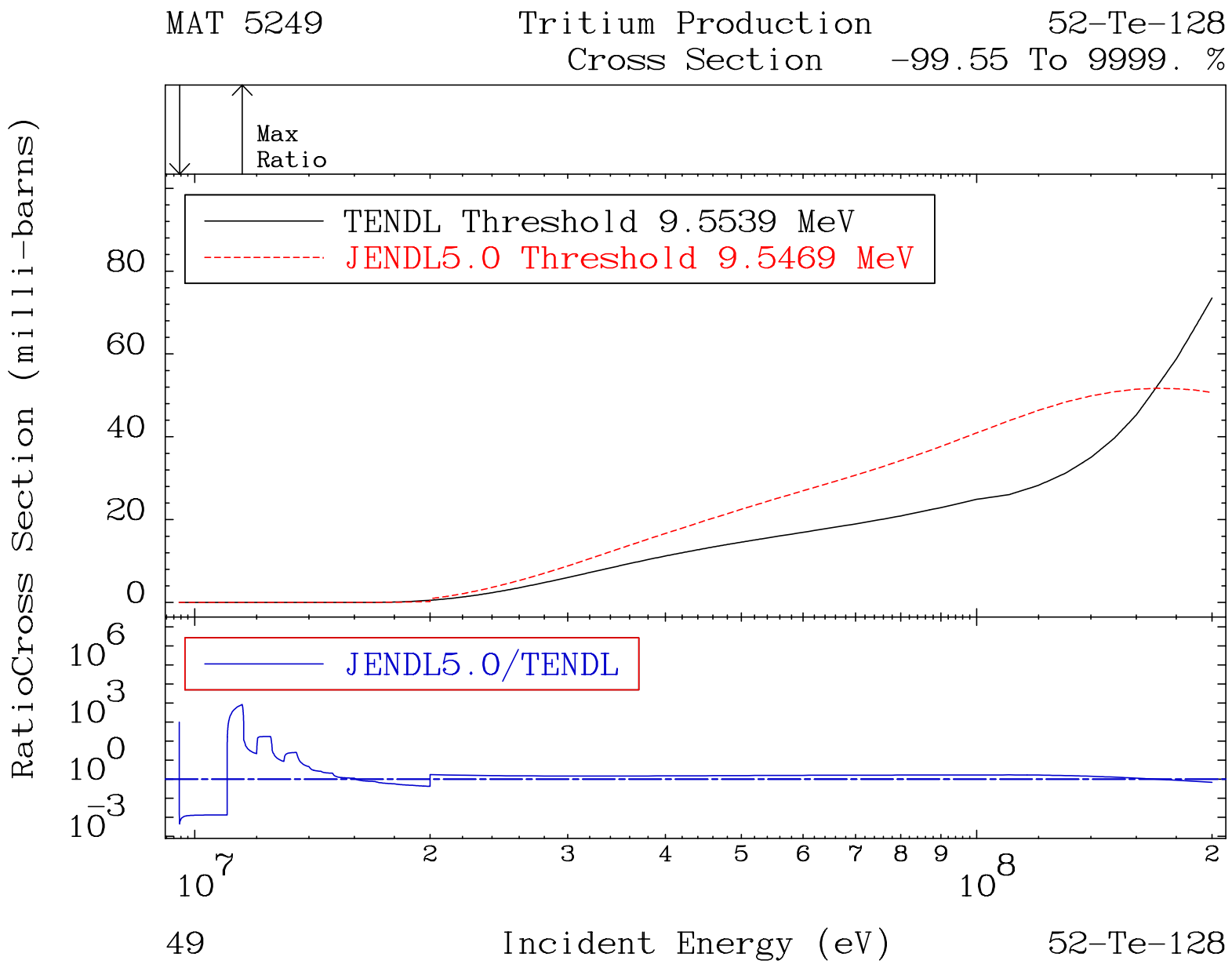

MAT 5249
(n,t)
Cross Section
52-Te-128
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 9.5539 MeV
JENDL5.0 Threshold 9.5469 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
44
52-Te-128

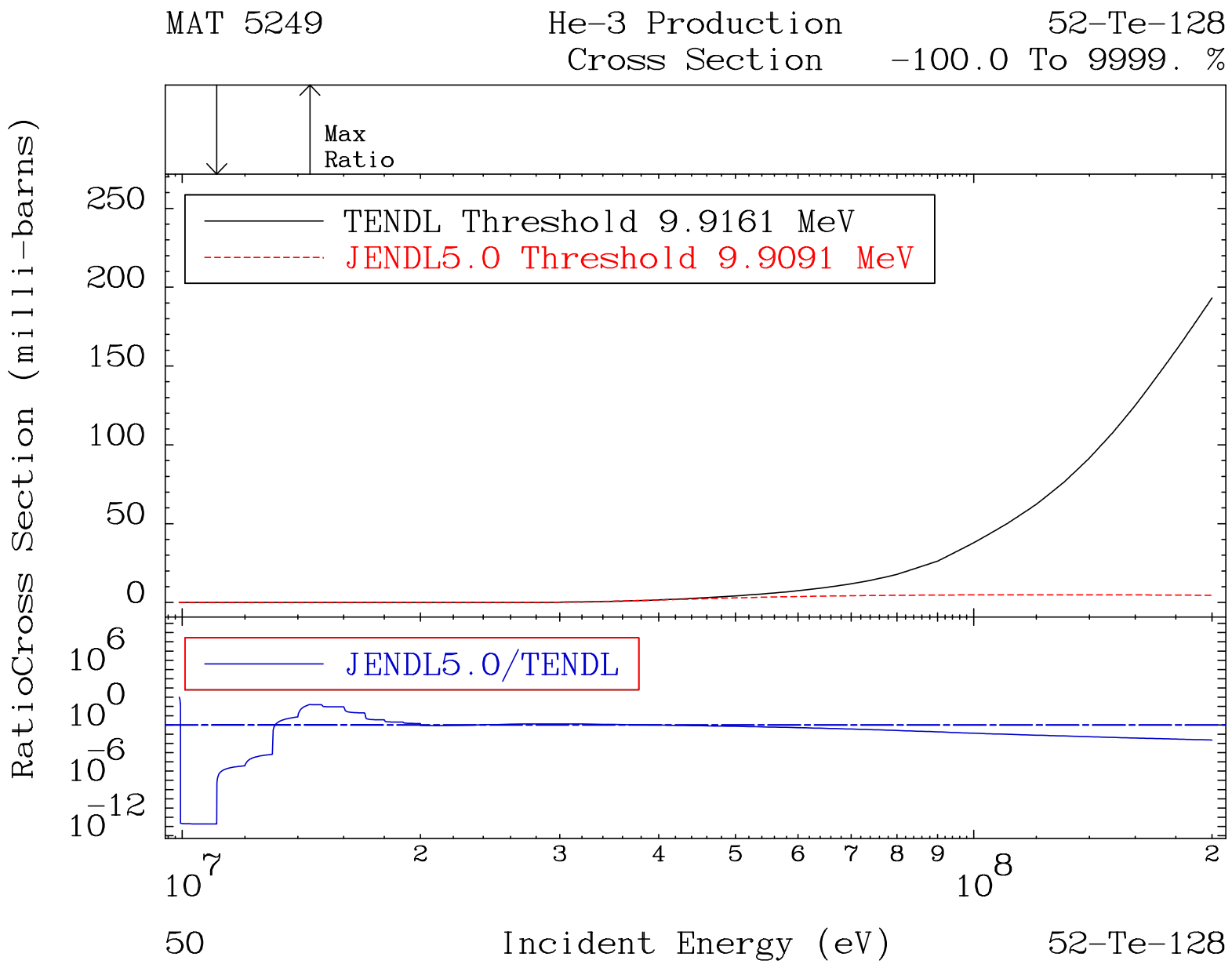

MAT 5249
(n,He-3)
52-Te-128
Cross Section
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 9.9161 MeV
JENDL5.0 Threshold 9.9091 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
200
150
100
50
0
200
100
0
10^7
2
3
4
5
6
7
8
9
10^8
2
45
Incident Energy (eV)
52-Te-128

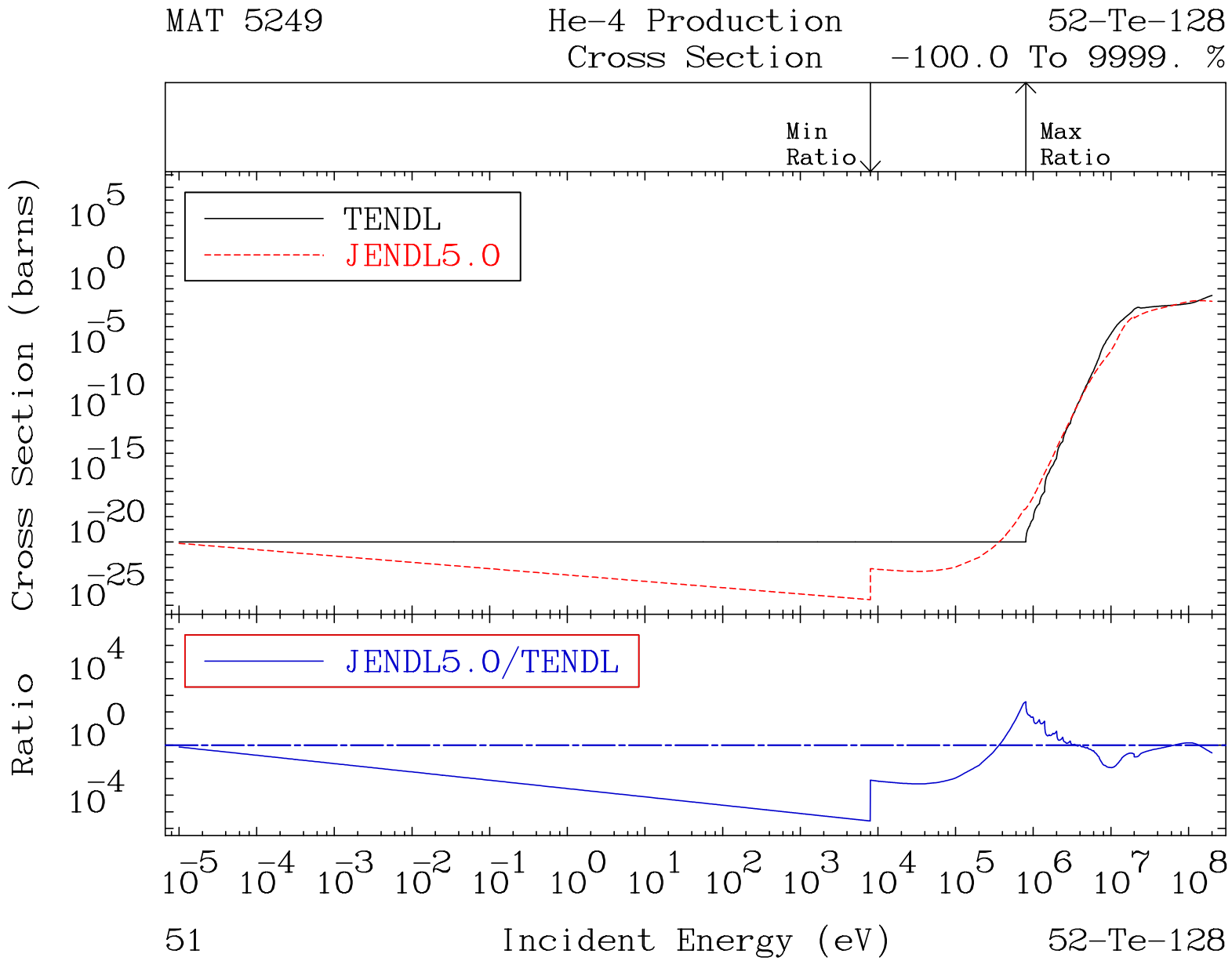

MAT 5249
(n,α)
52-Te-128
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
46
52-Te-128

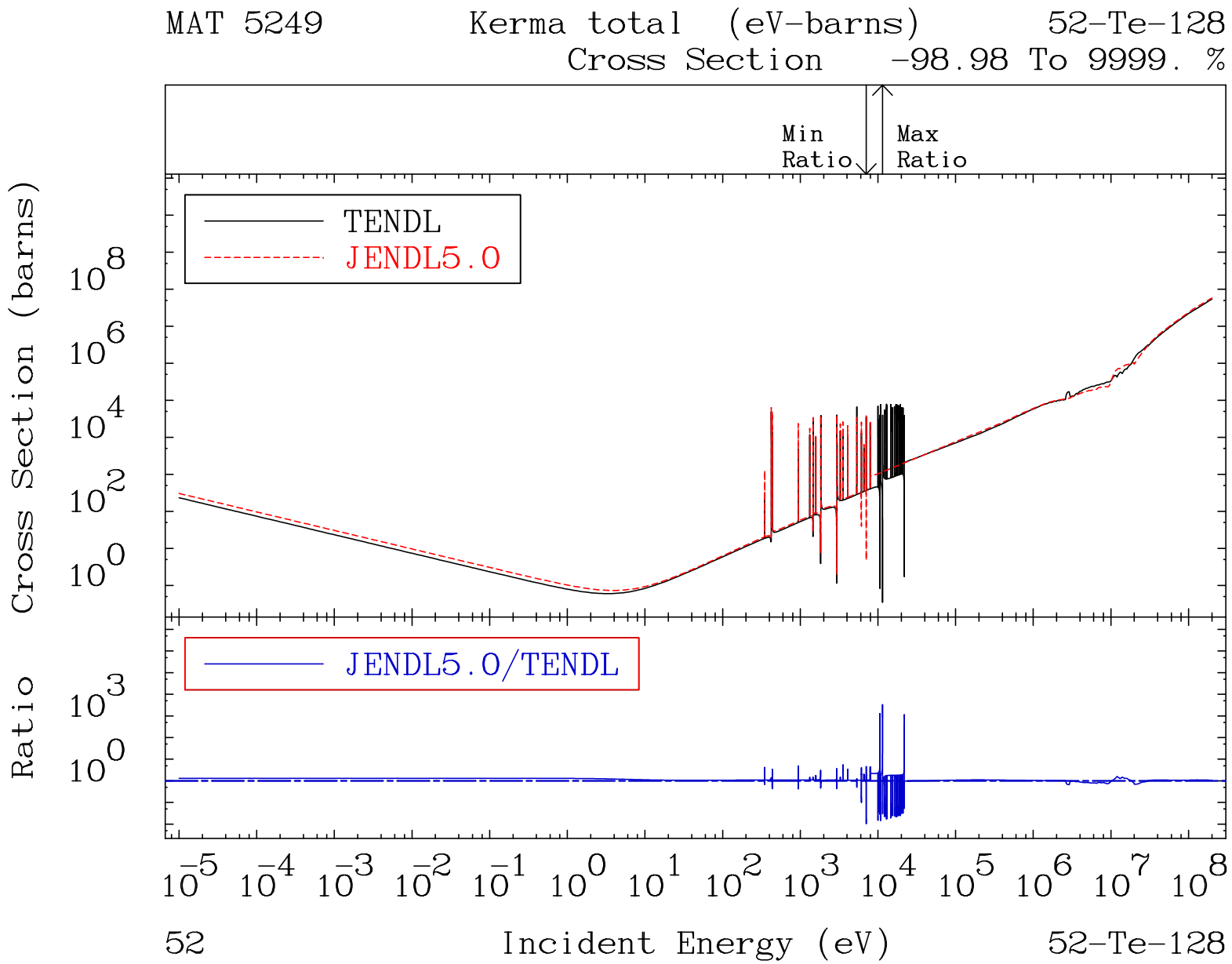

MAT 5249
Hydrogen Production
52-Te-128
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 3.6098 MeV
JENDL5.0 Threshold 3.6296 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.0
0.8
0.6
0.4
0.2
0.0
12
8
4
0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
47
Incident Energy (eV)
52-Te-128

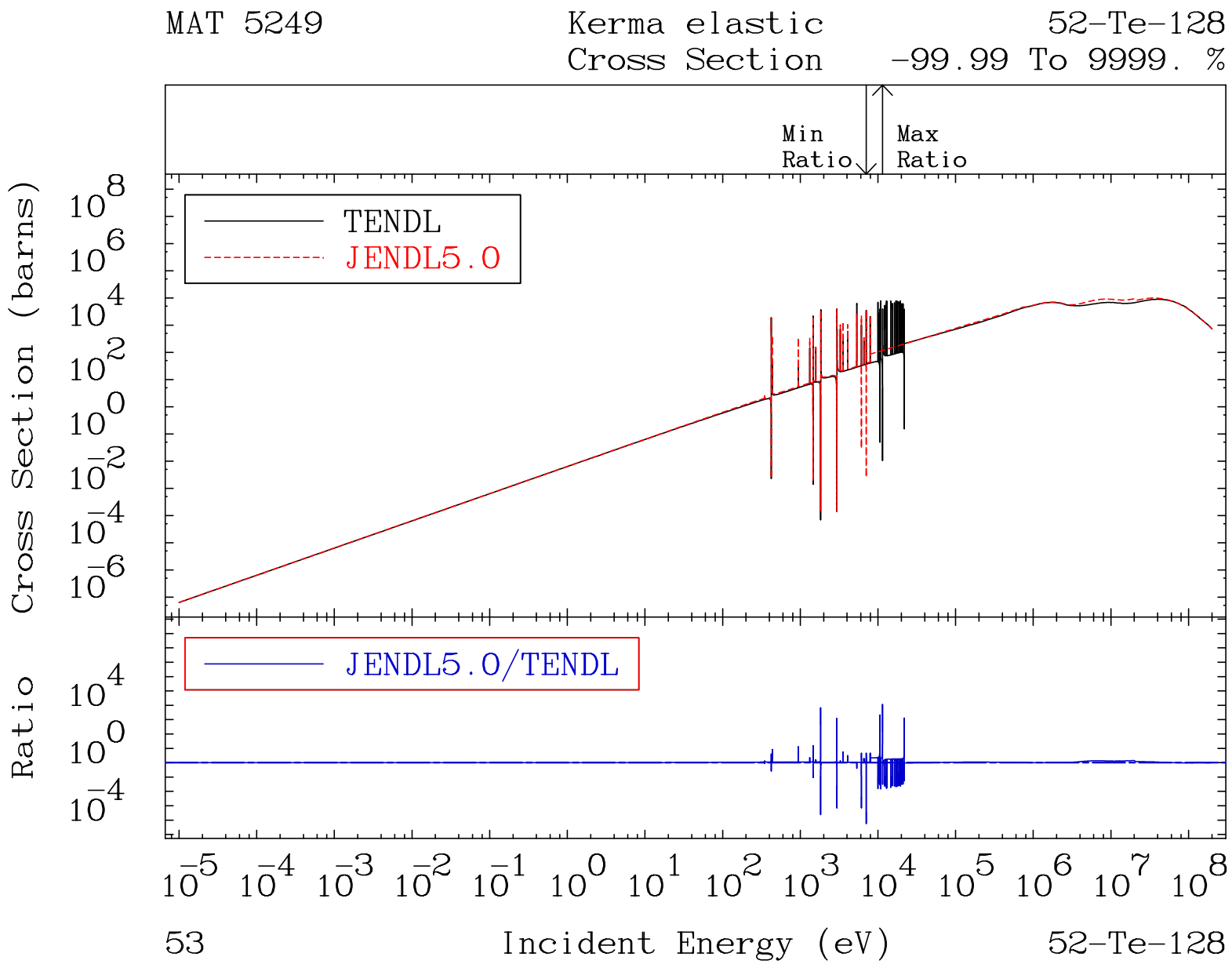

MAT 5249
Deuterium Production
52-Te-128
Cross Section
-99.86 To 9999. %
Max
Ratio
TENDL Threshold 7.4179 MeV
JENDL5.0 Threshold 7.4144 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
10^3
10^0
10^-3
8
10^7
2
3
4
5
6
7
8
10^8
2
48
Incident Energy (eV)
52-Te-128

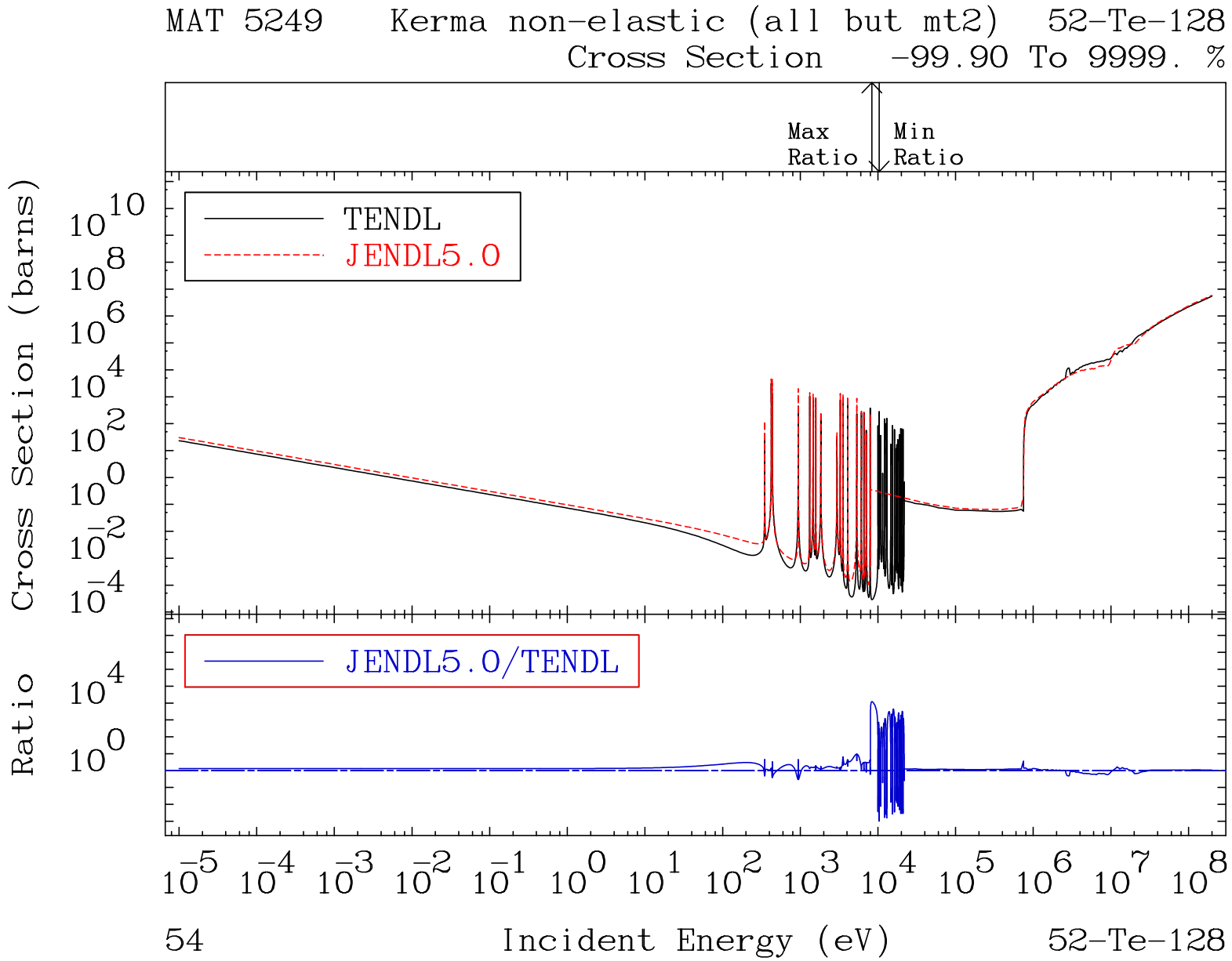

MAT 5249
Tritium Production
52-Te-128
Cross Section
-99.55 To 9999. %
Max
Ratio
TENDL Threshold 9.5539 MeV
JENDL5.0 Threshold 9.5469 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
10^6
10^3
10^0
10^-3
10^7
2
3
4
5
6
7
8
9
10^8
2
49
Incident Energy (eV)
52-Te-128

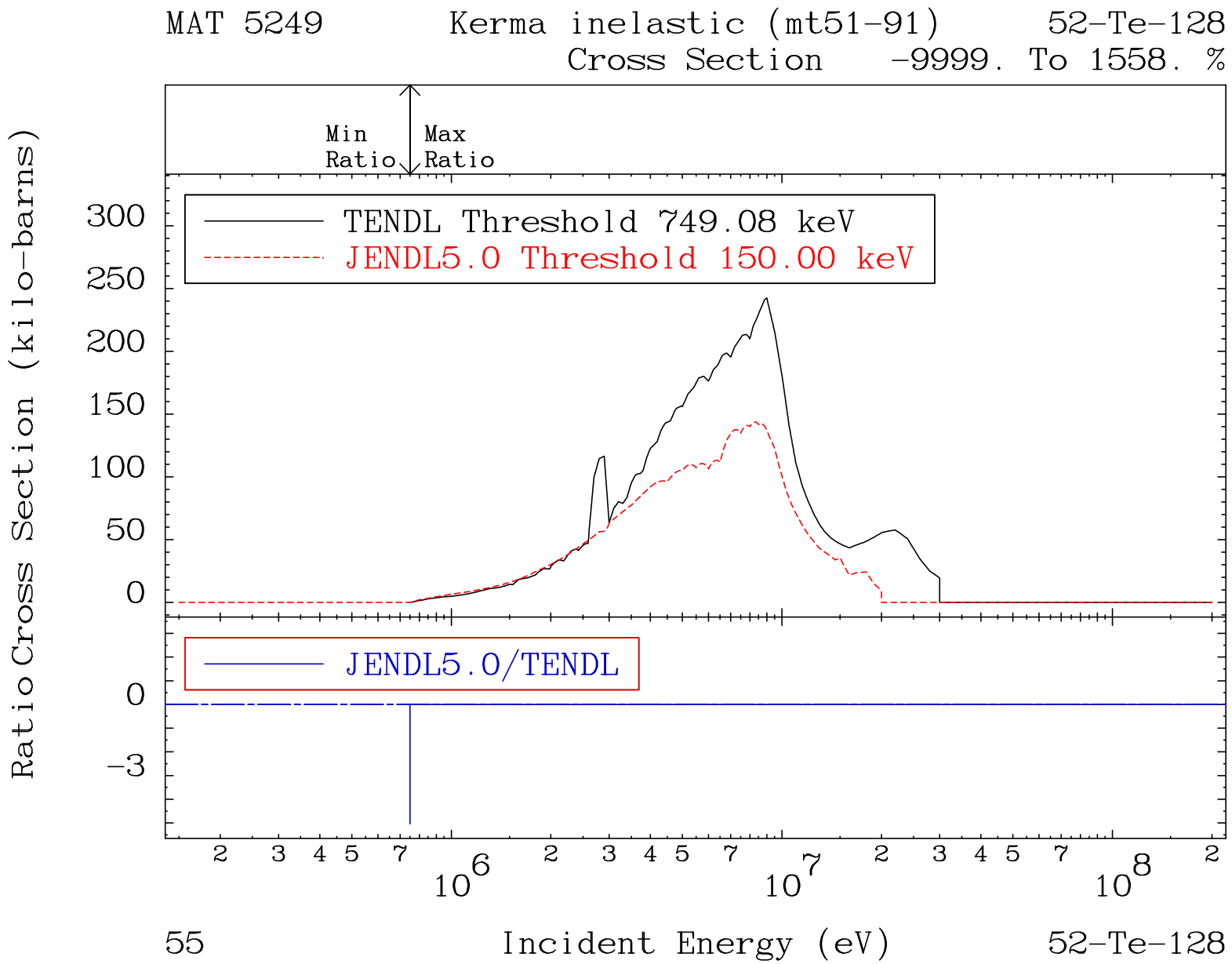

MAT 5249
He-3 Production
Cross Section
52-Te-128
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 9.9161 MeV
JENDL5.0 Threshold 9.9091 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
10^6
10^0
10^-6
10^-12
10^7
2
3
4
5
6
7
8
9
10^8
2
50
Incident Energy (eV)
52-Te-128

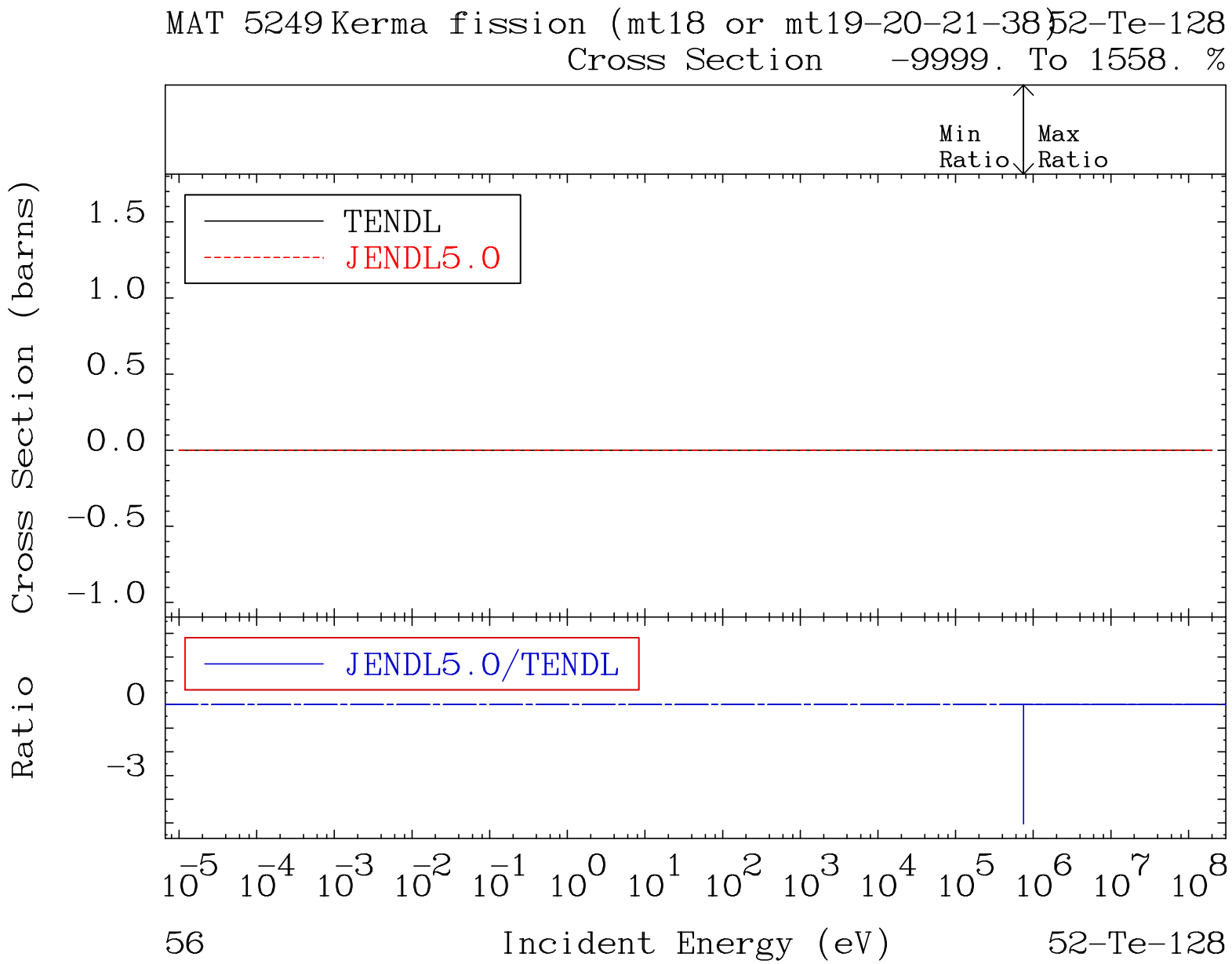

MAT 5249
He-4 Production
Cross Section
52-Te-128
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
51
52-Te-128

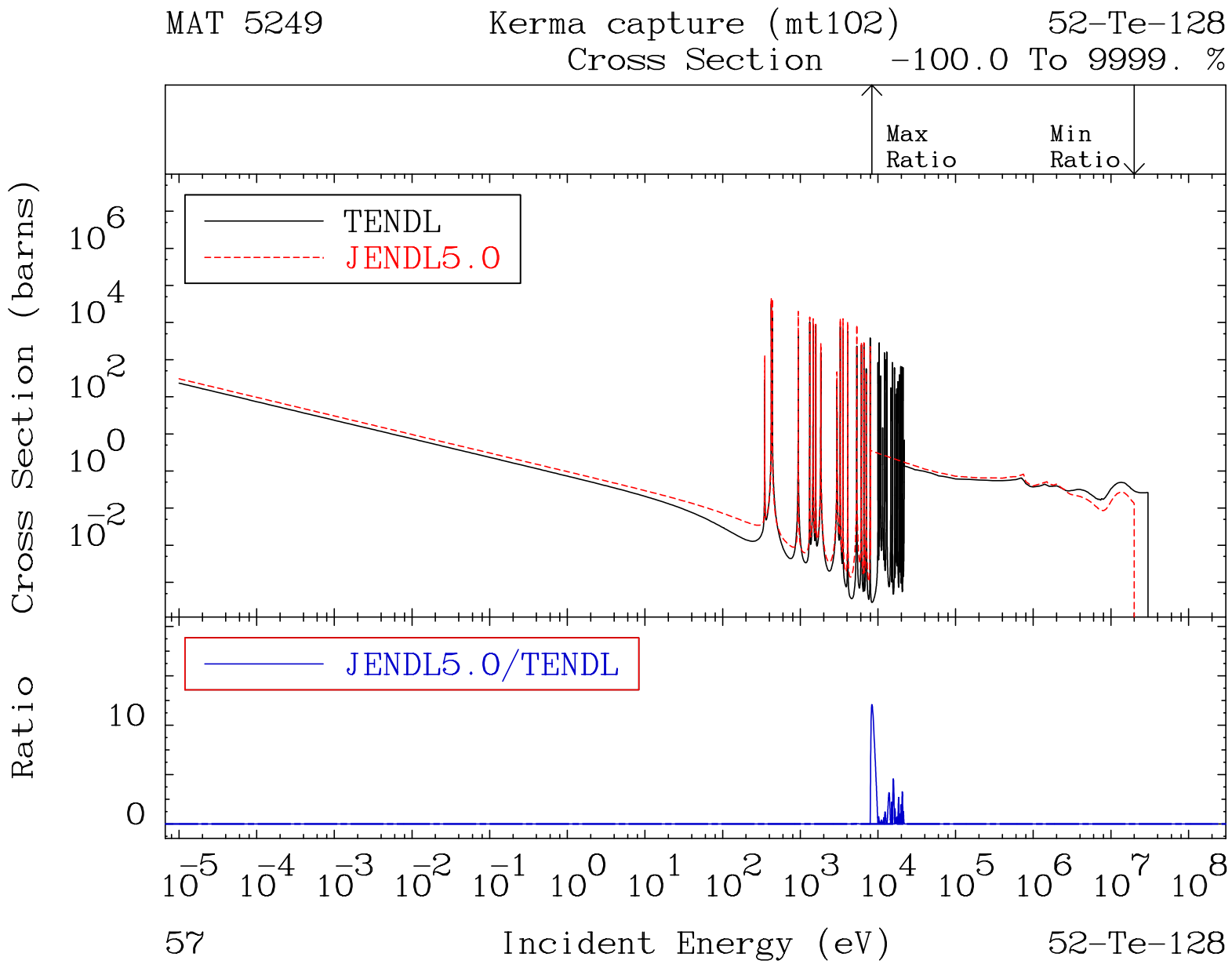

MAT 5249
Kerma total (eV-barns)
52-Te-128
Cross Section -98.98 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
52
52-Te-128

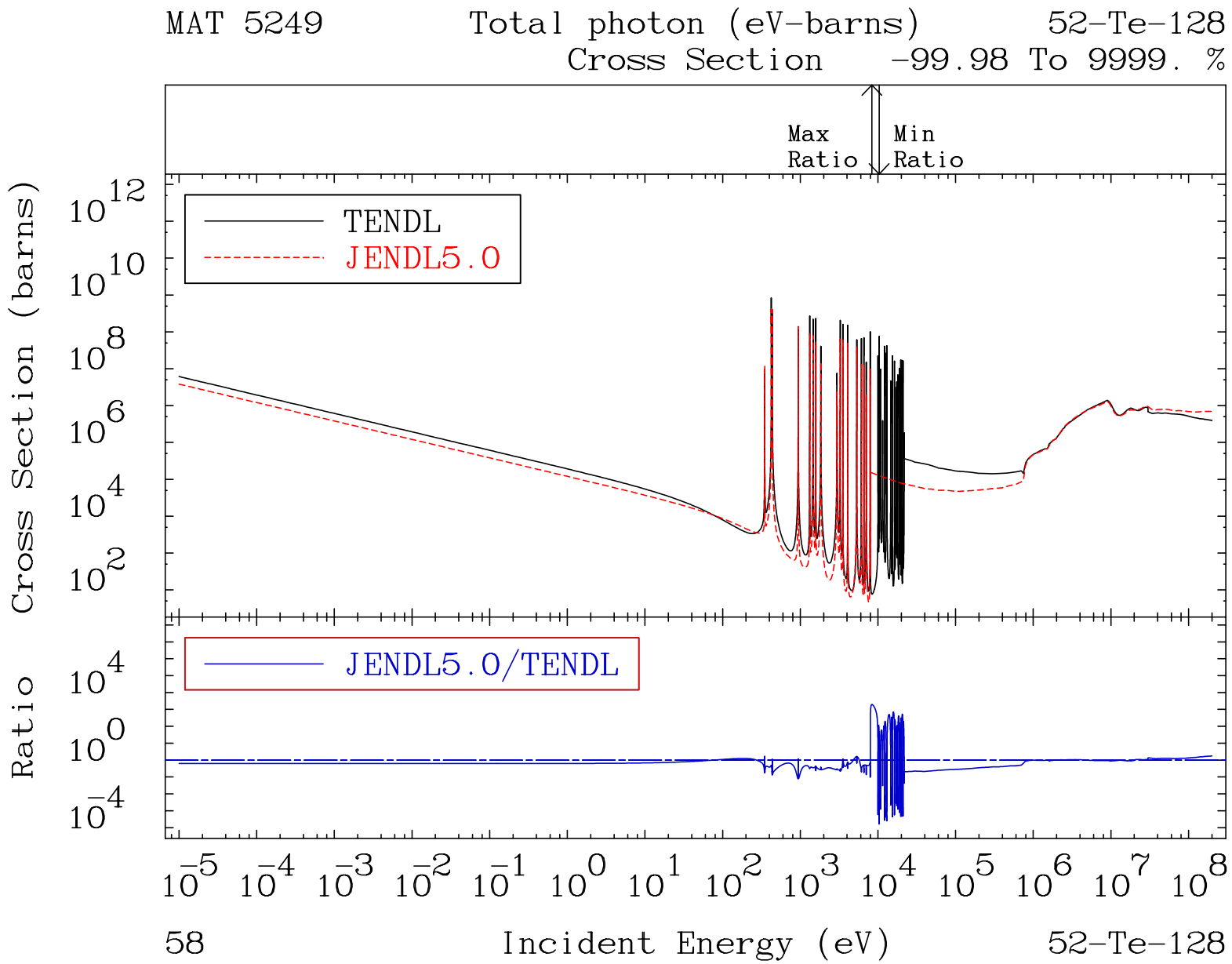

MAT 5249
Kerma elastic
Cross Section
52-Te-128
-99.99 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
53
52-Te-128

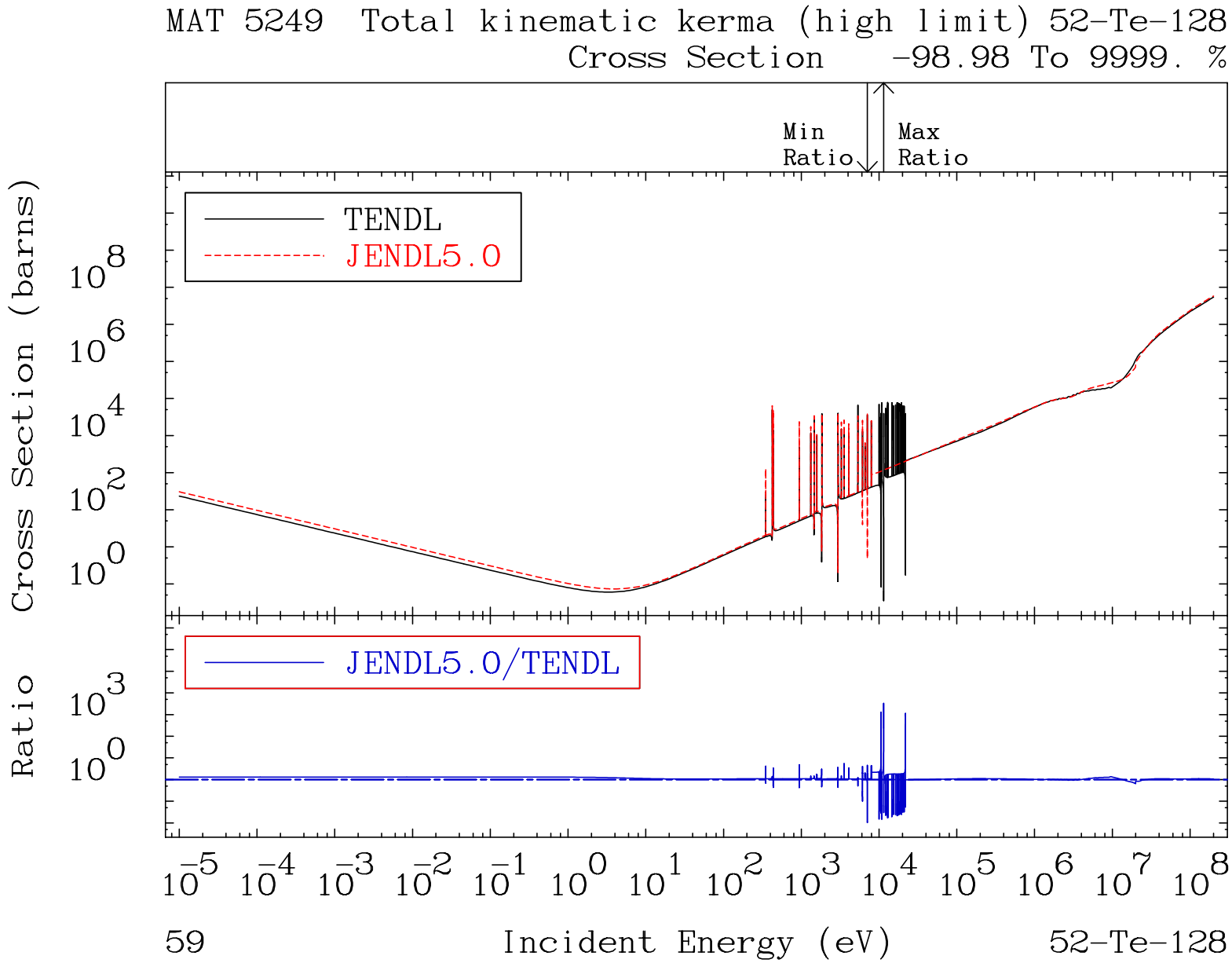

MAT 5249 Kerma non-elastic (all but mt2) 52-Te-128
Cross Section -99.90 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
54
52-Te-128

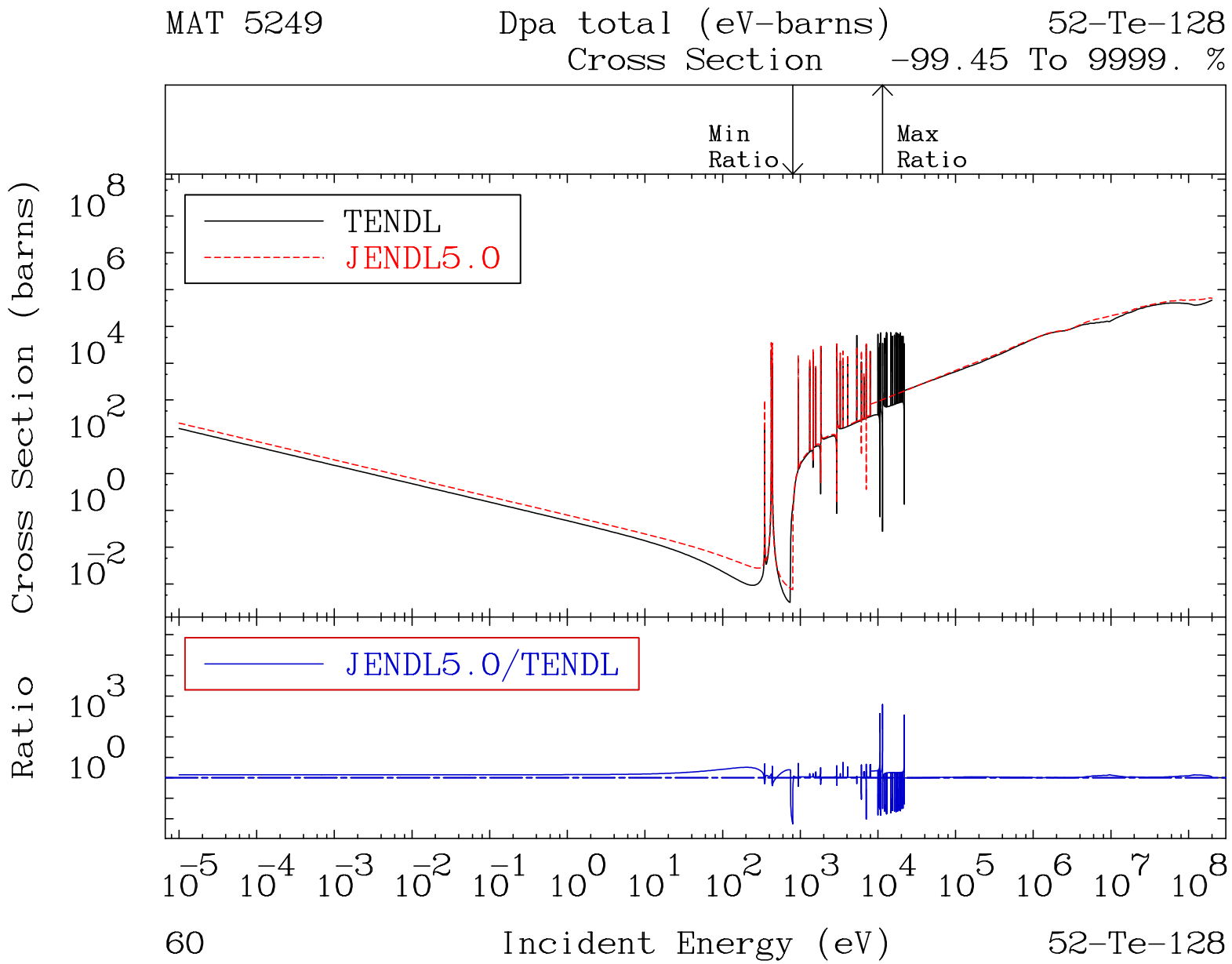

MAT 5249
Kerma inelastic (mt51-91)
52-Te-128
Cross Section -9999. To 1558. %
Min Ratio
Max Ratio
TENDL Threshold 749.08 keV
JENDL5.0 Threshold 150.00 keV
JENDL5.0/TENDL
Ratio Cross Section (kilo-barns)
300
250
200
150
100
50
0
0
-3
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
55
Incident Energy (eV)
52-Te-128

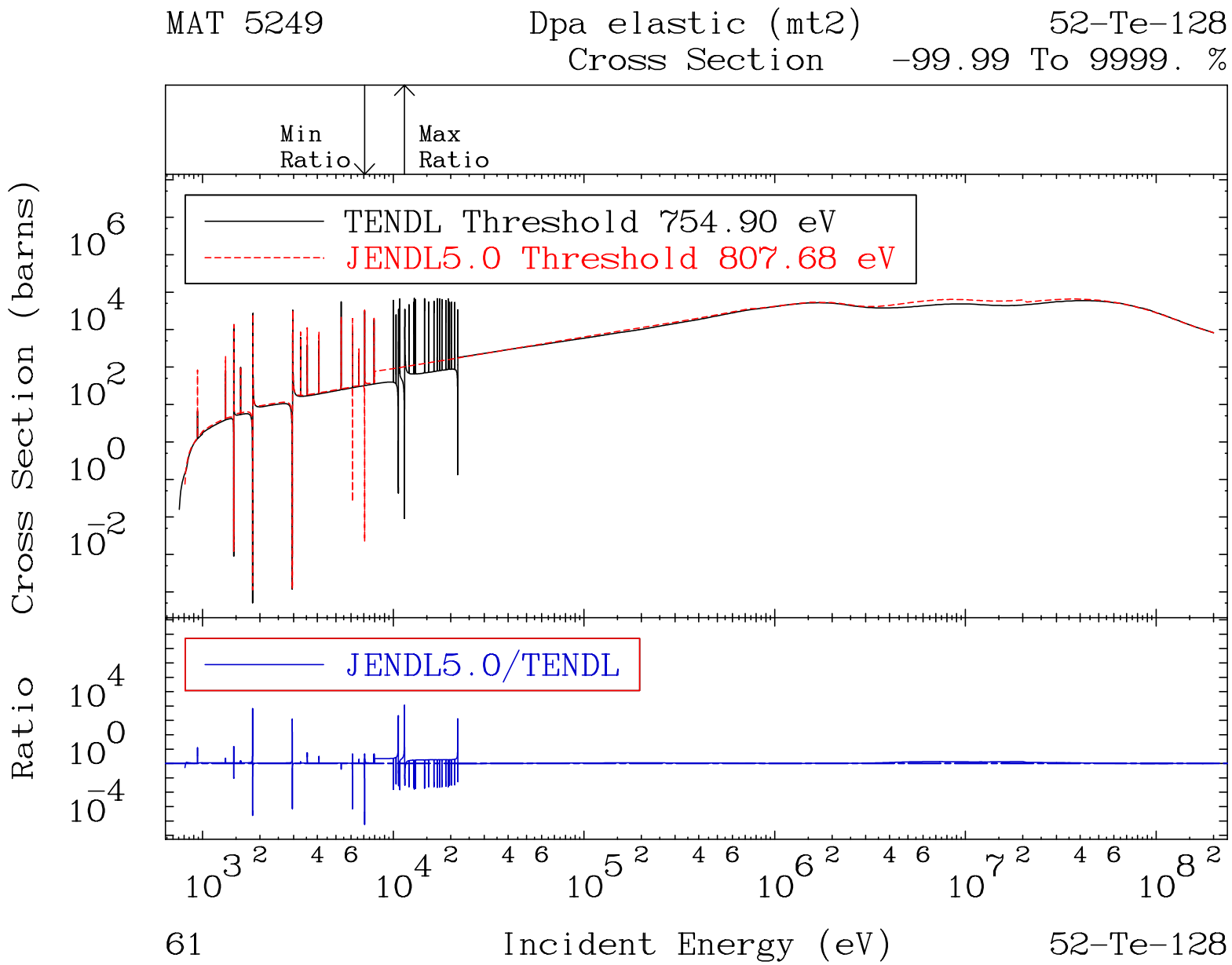

MAT 5249 Kerma fission (mt18 or mt19-20-21-38) 52-Te-128
Cross Section -9999. To 1558. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
0
-3
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
Incident Energy (eV)
56
52-Te-128

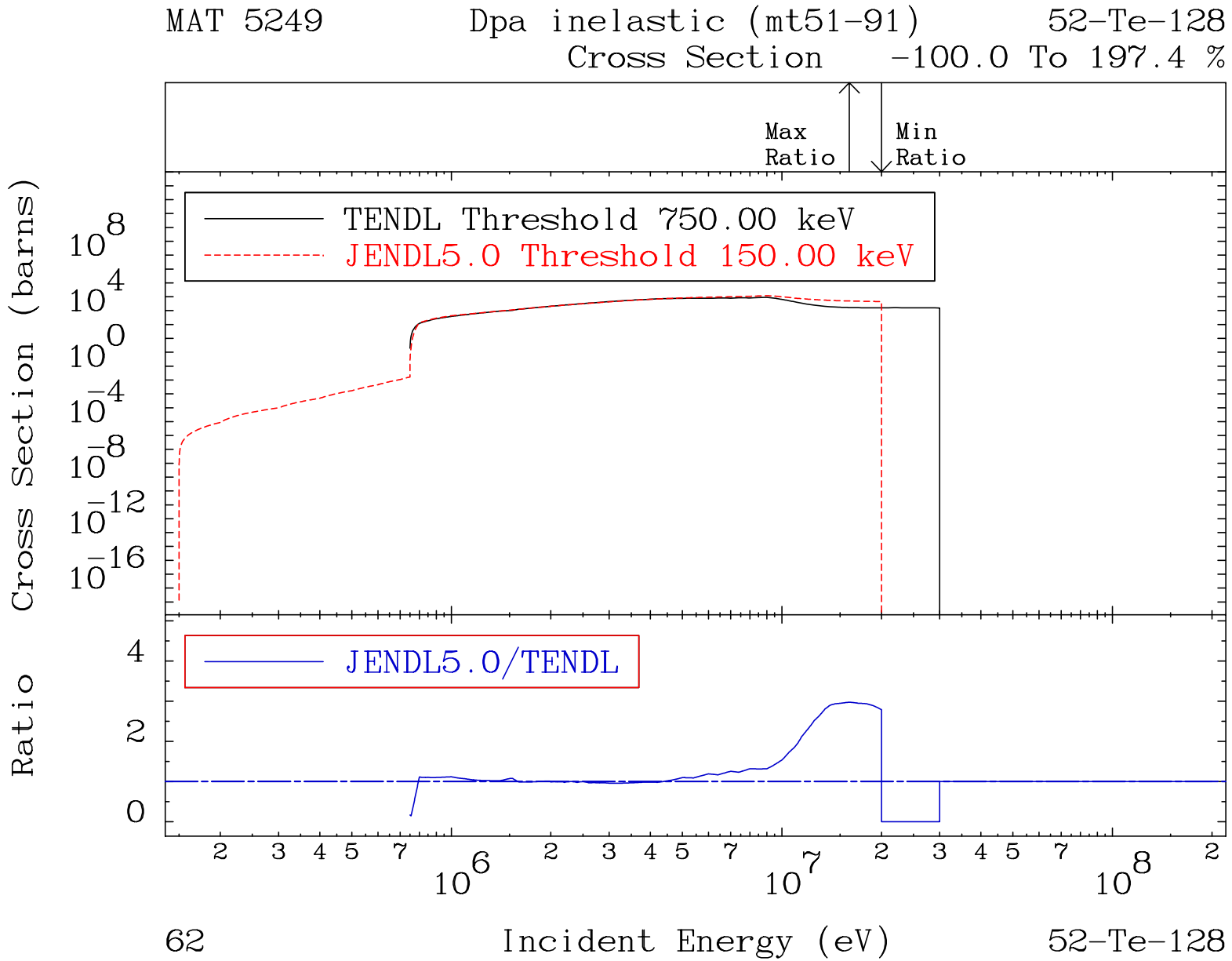

MAT 5249
Kerma capture (mt102)
52-Te-128
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
57
52-Te-128

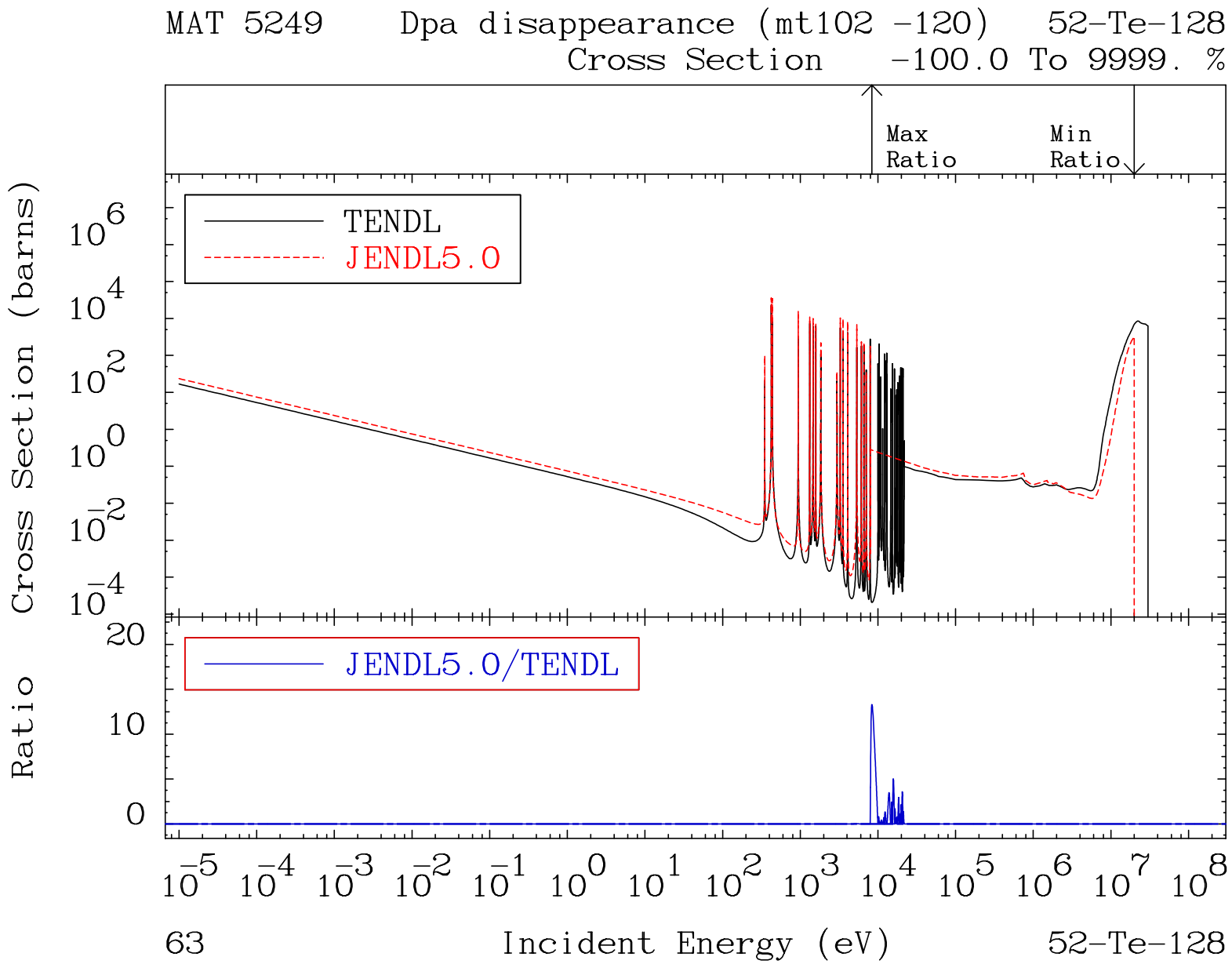

MAT 5249
Total photon (eV-barns)
52-Te-128
Cross Section -99.98 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
58
52-Te-128

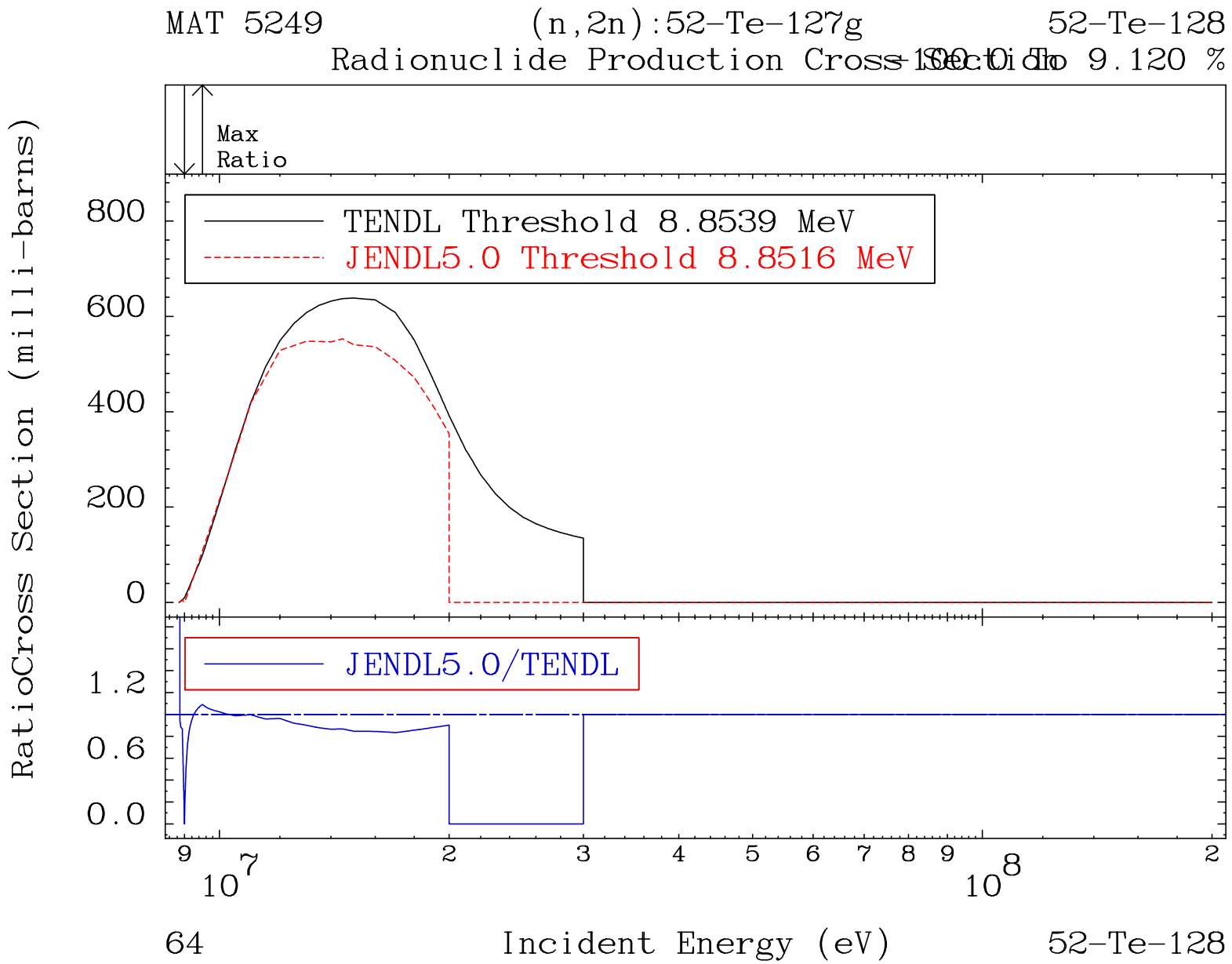

MAT 5249 Total kinematic kerma (high limit) 52-Te-128
Cross Section -98.98 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
59
52-Te-128

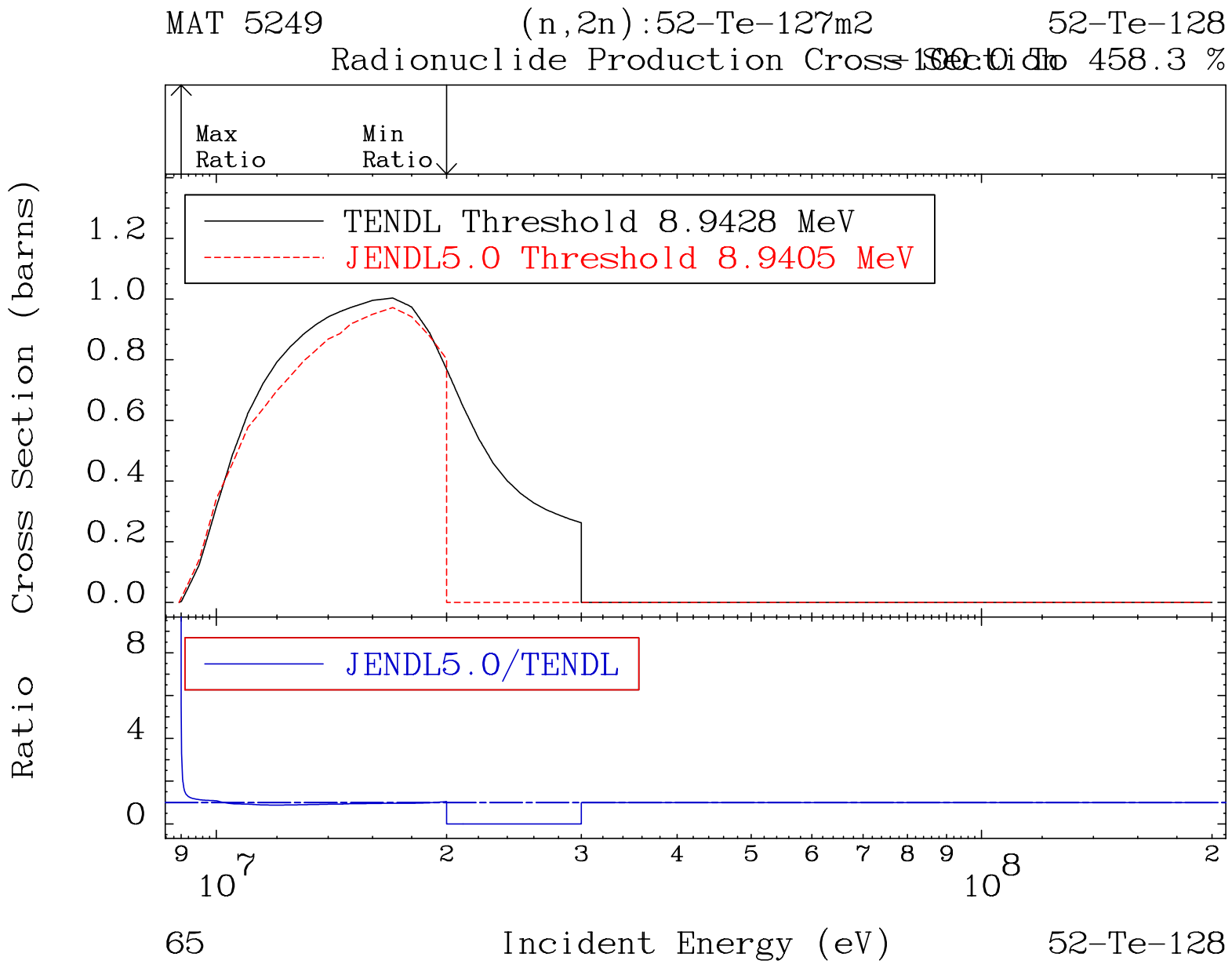

MAT 5249
Dpa total (eV-barns)
52-Te-128
Cross Section
-99.45 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
60
52-Te-128

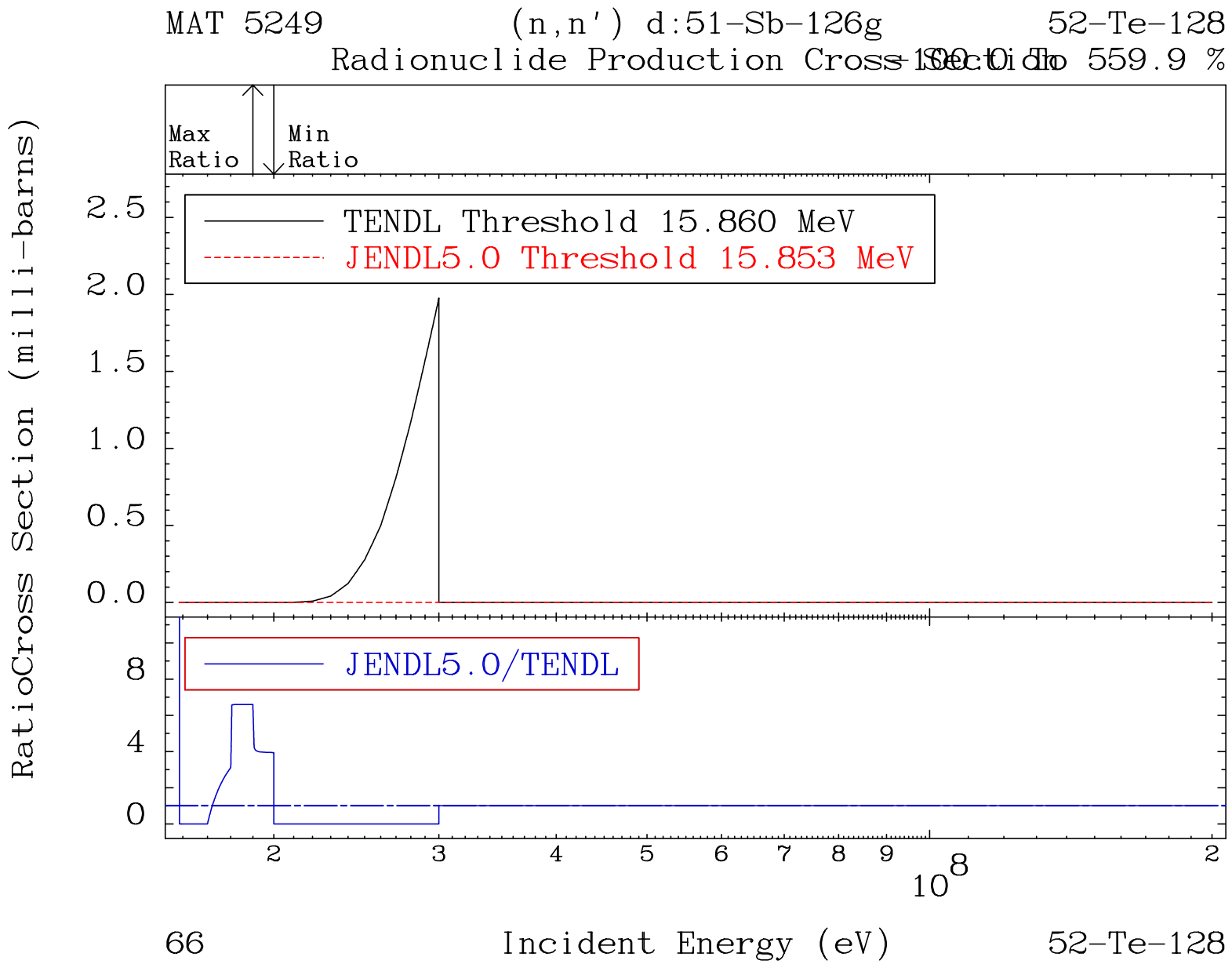

MAT 5249
Dpa elastic (mt2)
Cross Section
52-Te-128
-99.99 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 754.90 eV
JENDL5.0 Threshold 807.68 eV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
61
52-Te-128

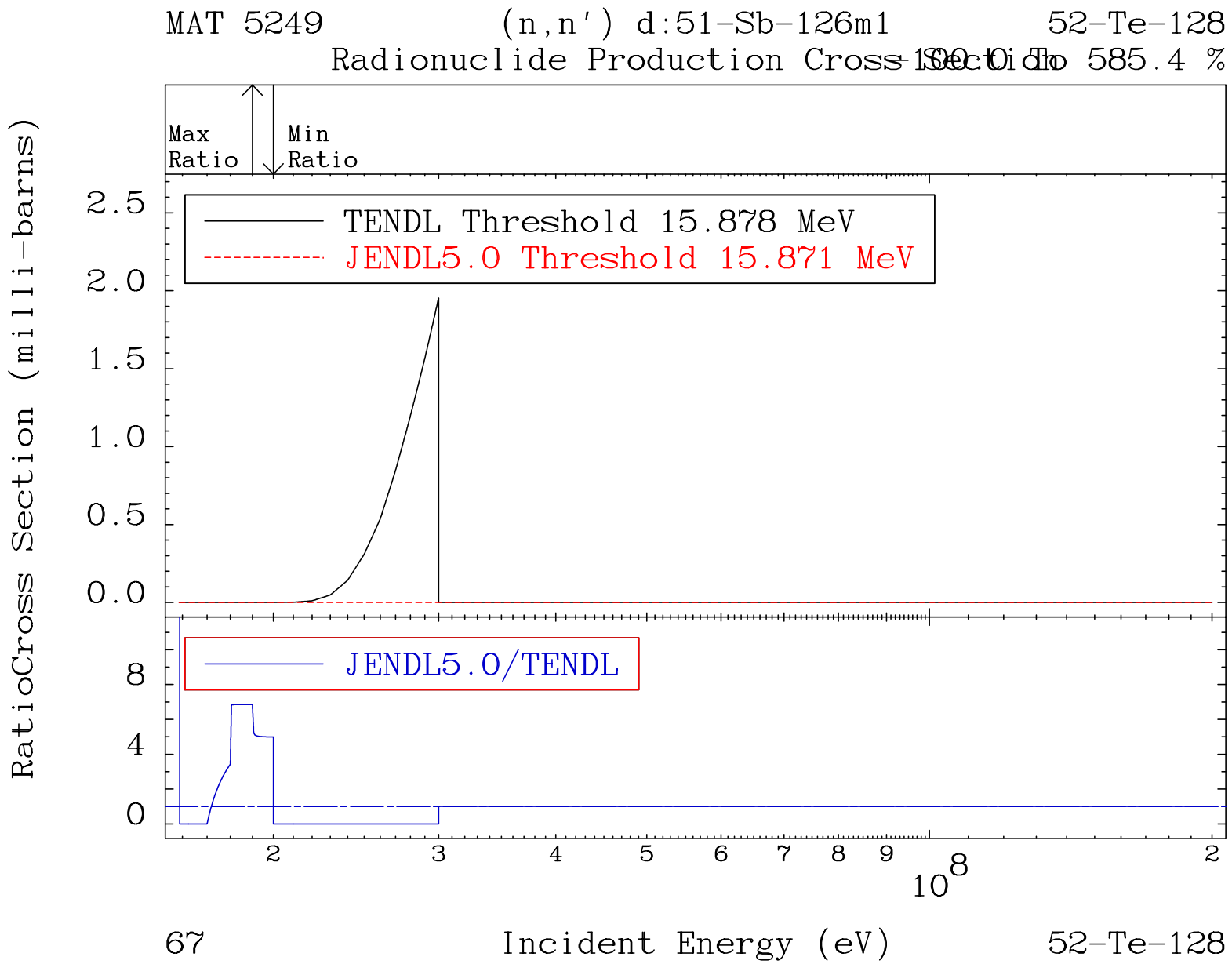

MAT 5249
Dpa inelastic (mt51-91)
52-Te-128
Cross Section -100.0 To 197.4 %
Max Ratio
Min Ratio
TENDL Threshold 750.00 keV
JENDL5.0 Threshold 150.00 keV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
62
52-Te-128

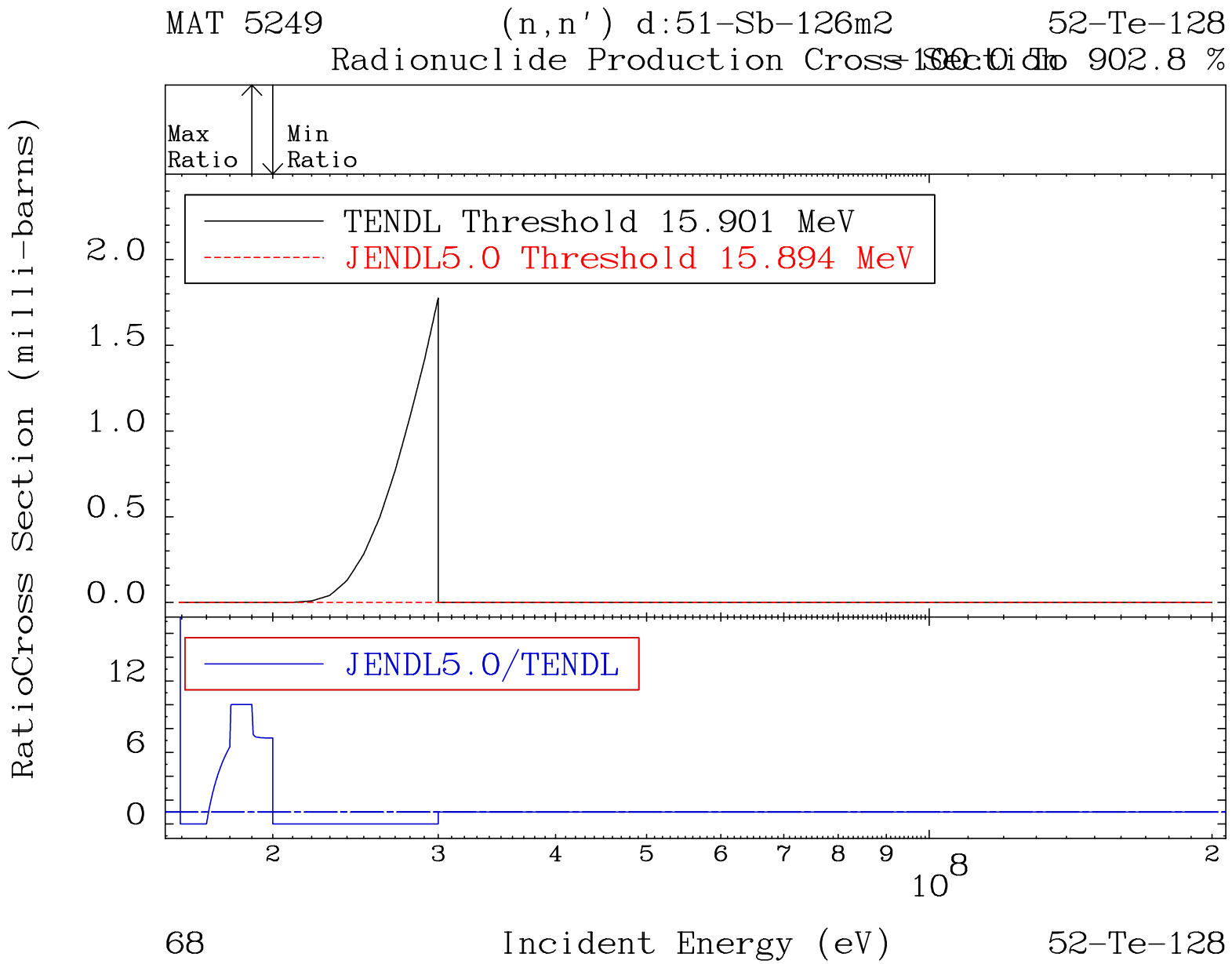

MAT 5249 Dpa disappearance (mt102 -120) 52-Te-128
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
63
52-Te-128

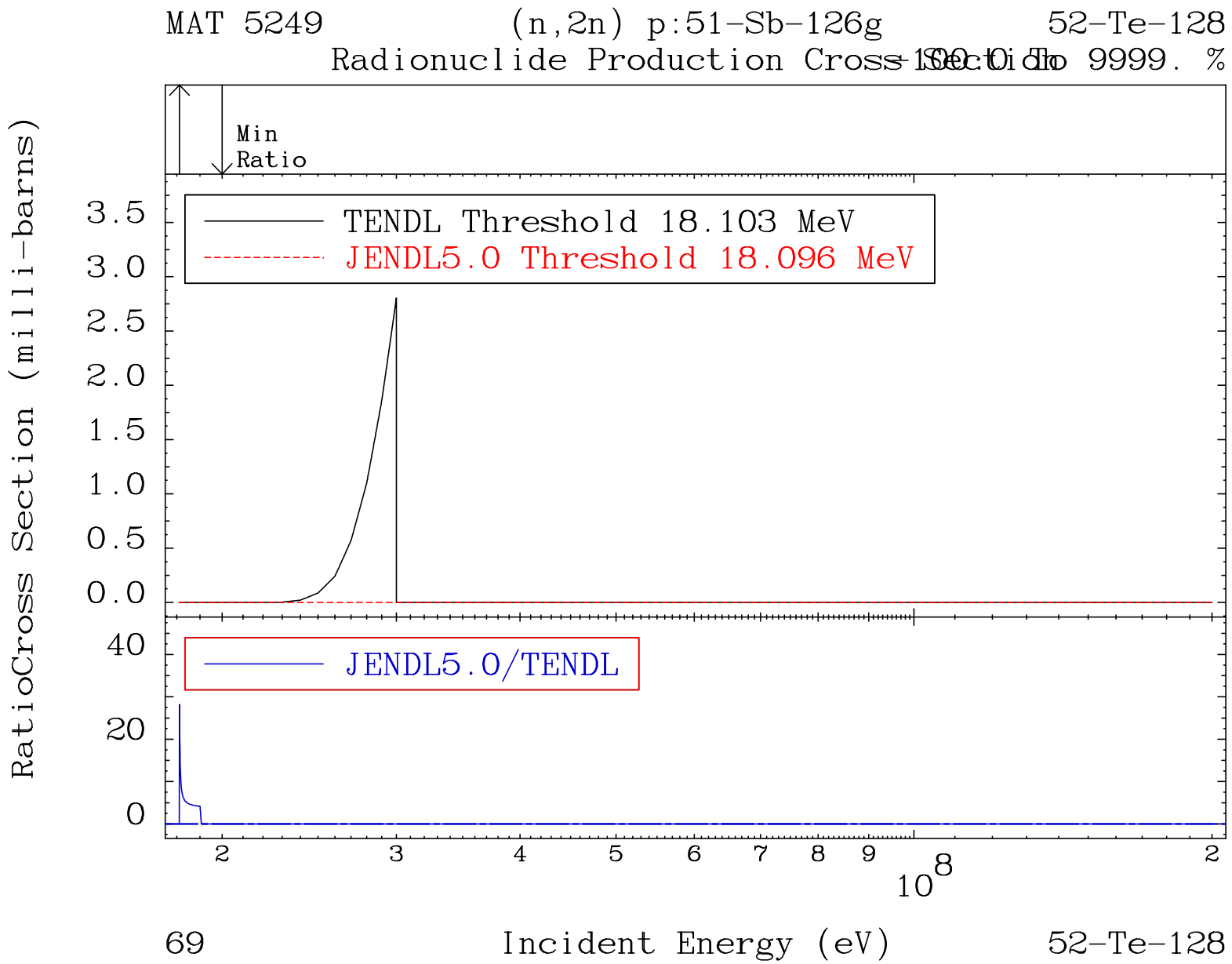

MAT 5249
(n,2n):52-Te-127g
52-Te-128
Radionuclide Production Cross Section To 9.120 %
Max
Ratio
TENDL Threshold 8.8539 MeV
JENDL5.0 Threshold 8.8516 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
800
600
400
200
0
1.2
0.6
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
64
Incident Energy (eV)
52-Te-128

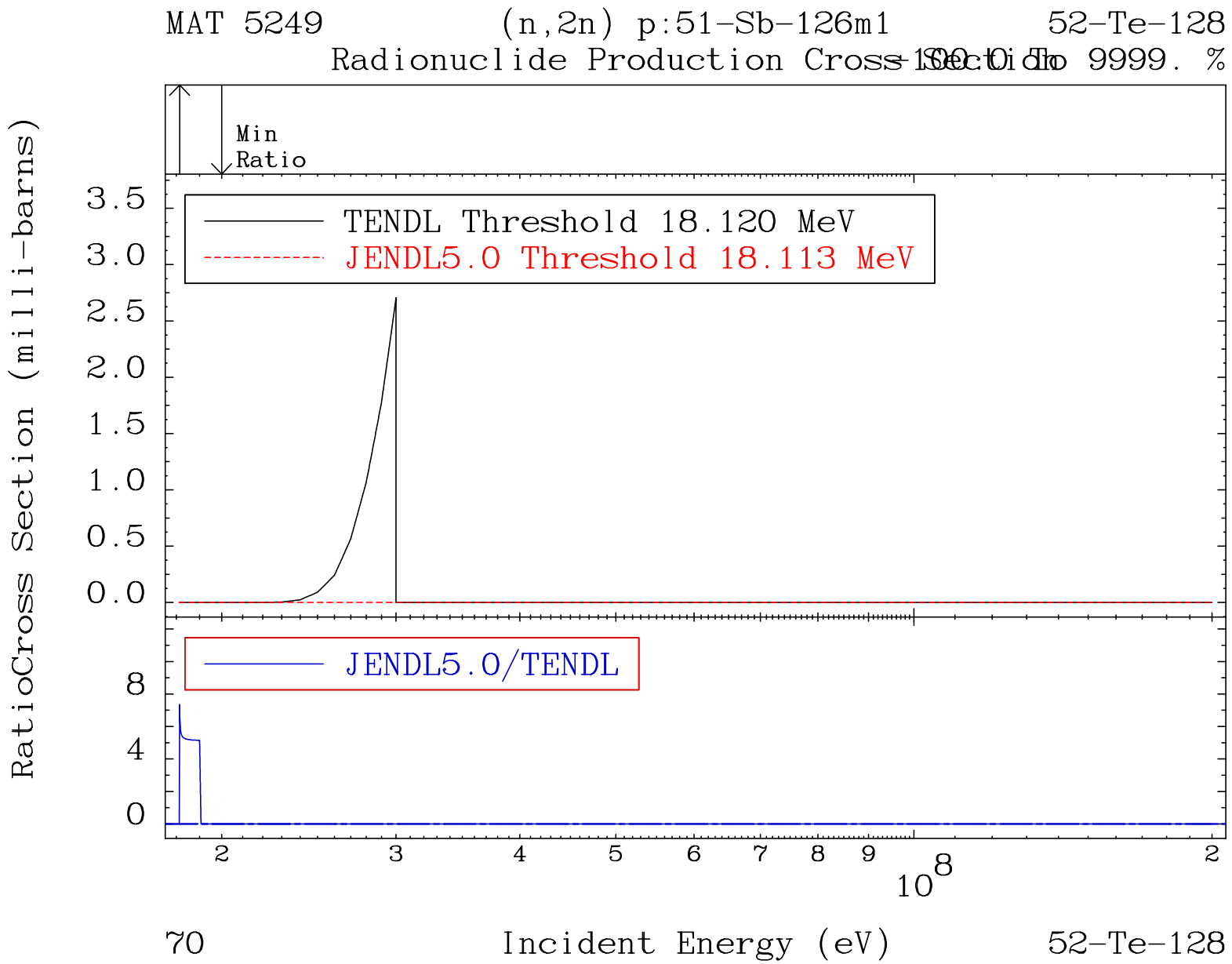

MAT 5249
(n,2n):52-Te-127m2
52-Te-128
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 8.9428 MeV
JENDL5.0 Threshold 8.9405 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
65
52-Te-128

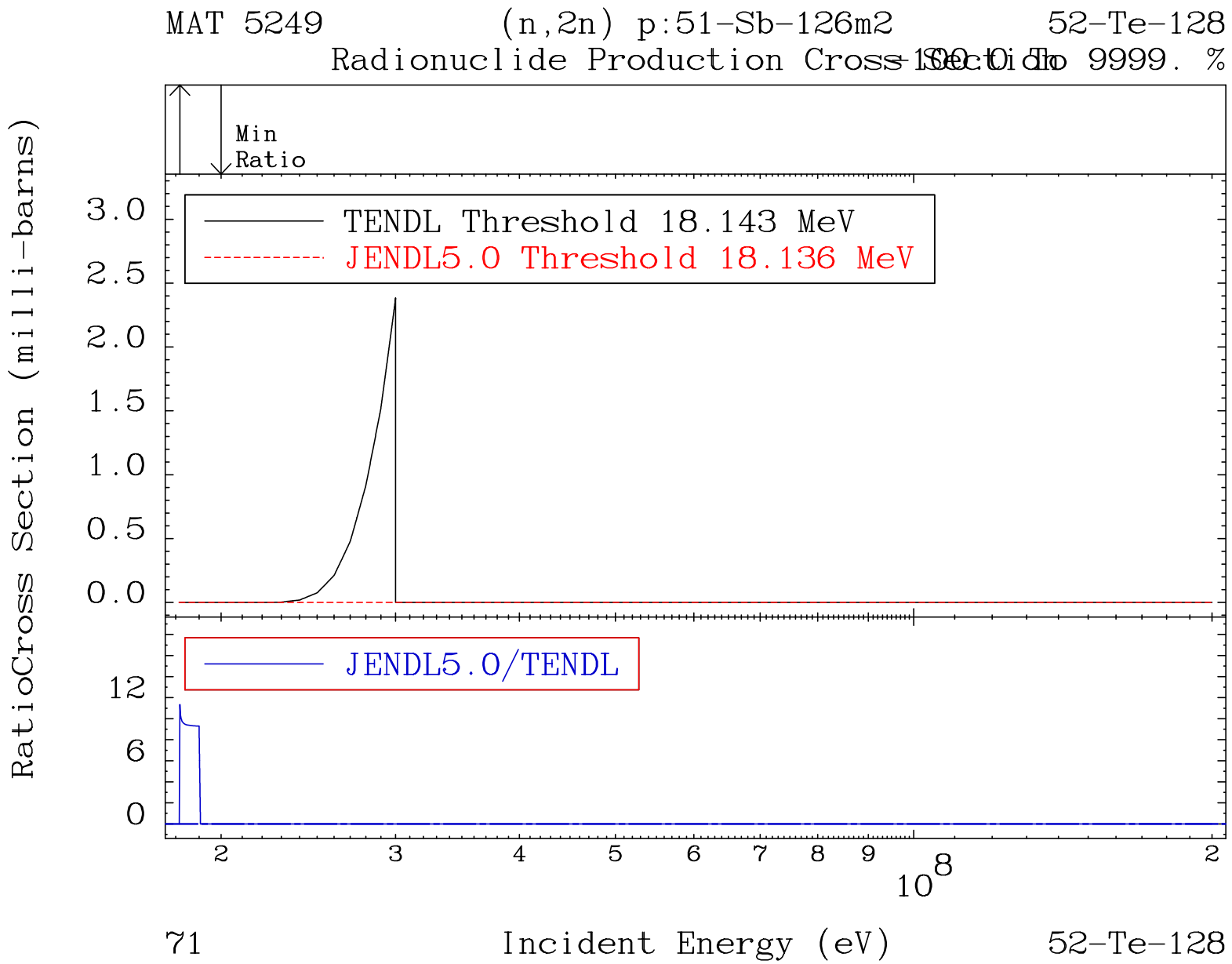

MAT 5249
(n,n') d:51-Sb-126g
52-Te-128
Radionuclide Production Cross Section To 559.9 %
Max Ratio
Min Ratio
TENDL Threshold 15.860 MeV
JENDL5.0 Threshold 15.853 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
8
4
0
2
3
4
5
6
7
8
9
2
10^8
66
Incident Energy (eV)
52-Te-128

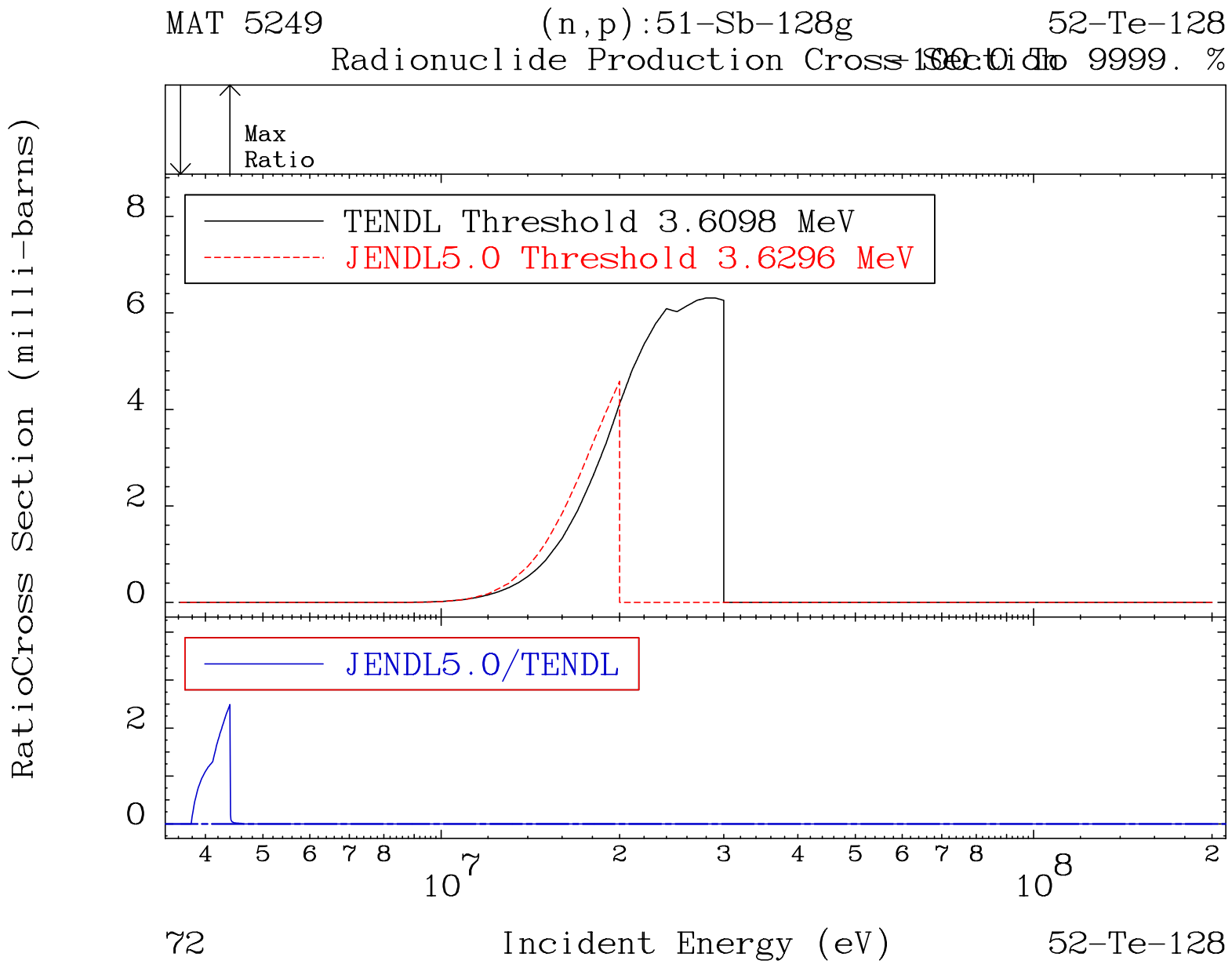

MAT 5249
(n,n') d:51-Sb-126m1
52-Te-128
Radionuclide Production Cross Section To 585.4 %
Max Ratio
Min Ratio
TENDL Threshold 15.878 MeV
JENDL5.0 Threshold 15.871 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
8
4
0
2
3
4
5
6
7
8
9
10^8
2
67
Incident Energy (eV)
52-Te-128

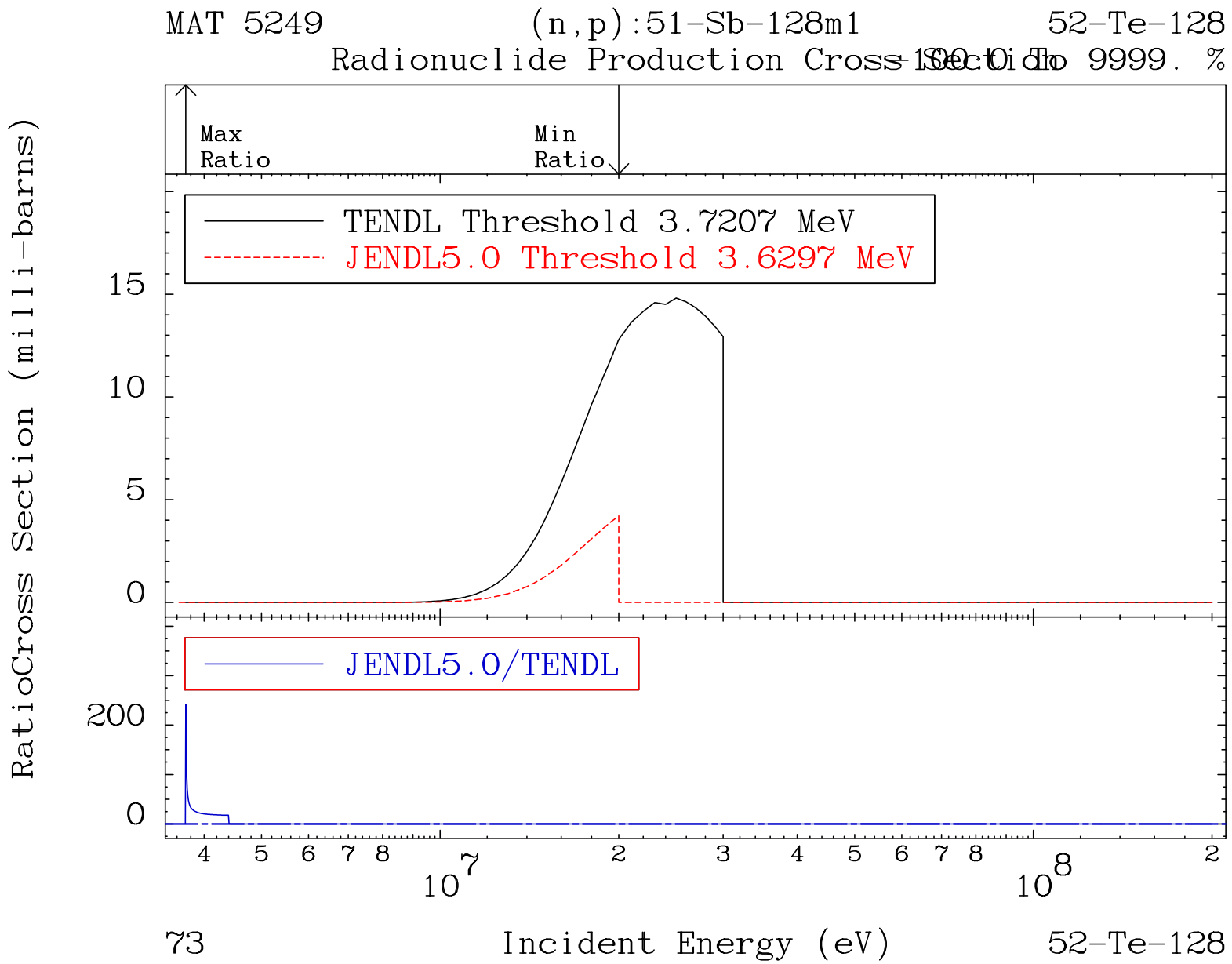

MAT 5249 (n,n') d:51-Sb-126m2 52-Te-128
Radionuclide Production Cross Section To 902.8 %
Max Ratio
Min Ratio
TENDL Threshold 15.901 MeV
JENDL5.0 Threshold 15.894 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
12
6
0
2
3
4
5
6
7
8
9
10^8
2
68
Incident Energy (eV)
52-Te-128

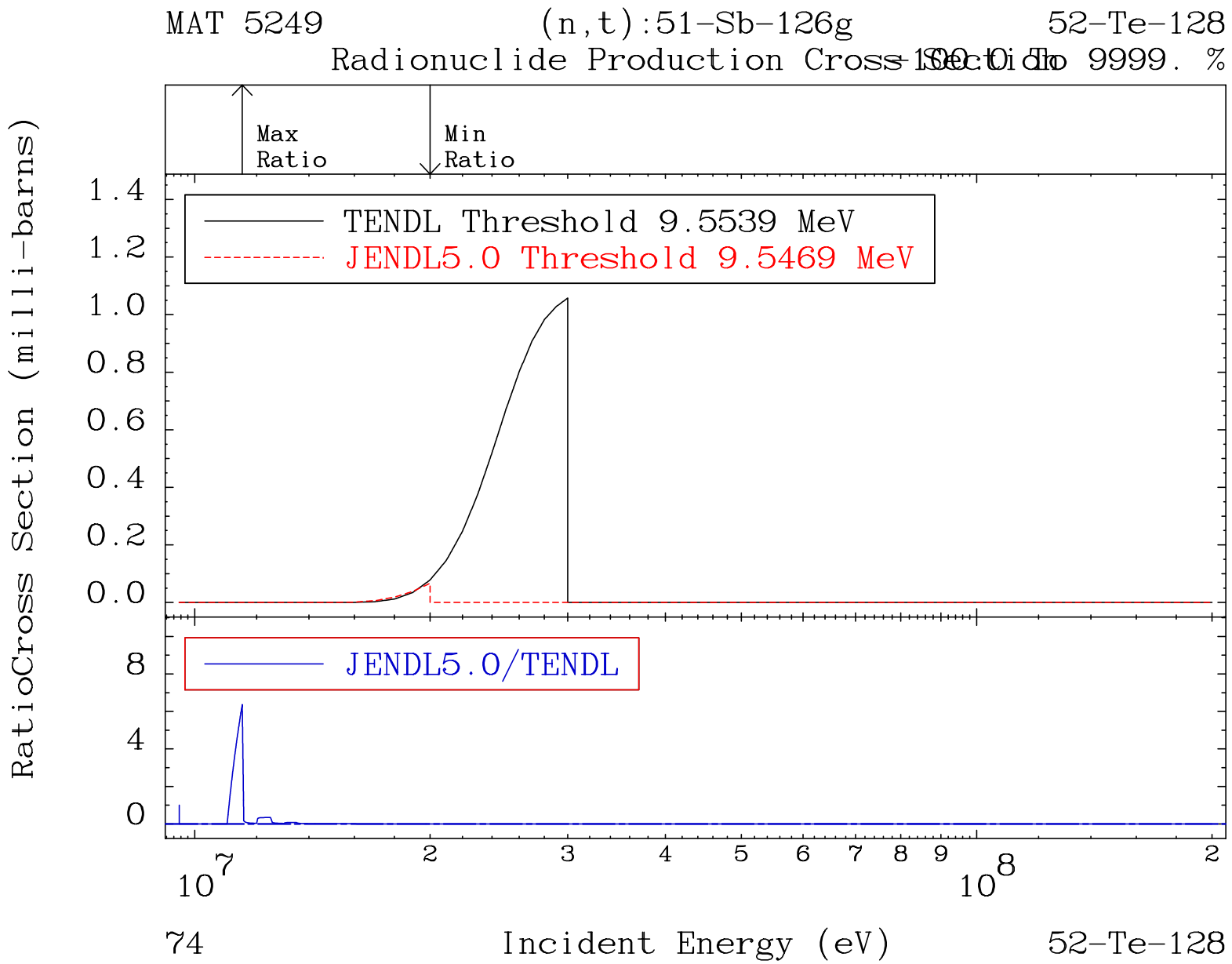

MAT 5249
(n,2n) p:51-Sb-126g
52-Te-128
Radionuclide Production Cross Section To 9999. %
Min
Ratio
TENDL Threshold 18.103 MeV
JENDL5.0 Threshold 18.096 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
40
20
0
2
3
4
5
6
7
8
9
10^8
2
69
Incident Energy (eV)
52-Te-128

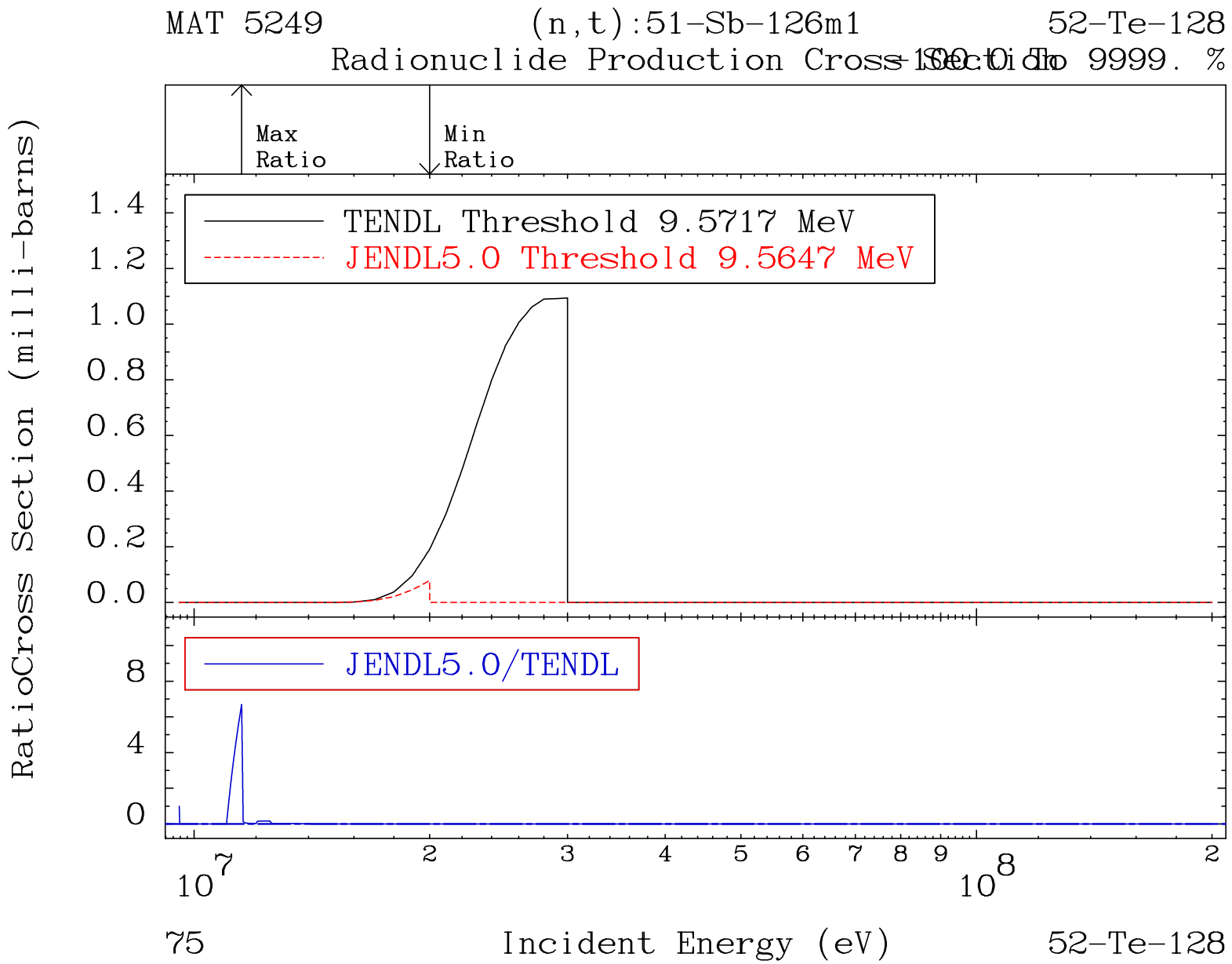

MAT 5249
(n,2n) p:51-Sb-126m1
52-Te-128
Radionuclide Production Cross Section
1.00 To 9999. %
Min
Ratio
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
TENDL Threshold 18.120 MeV
JENDL5.0 Threshold 18.113 MeV
JENDL5.0/TENDL
8
4
0
2
3
4
5
6
7
8
9
10^8
2
RatioCross Section (milli-barns)
70
Incident Energy (eV)
52-Te-128

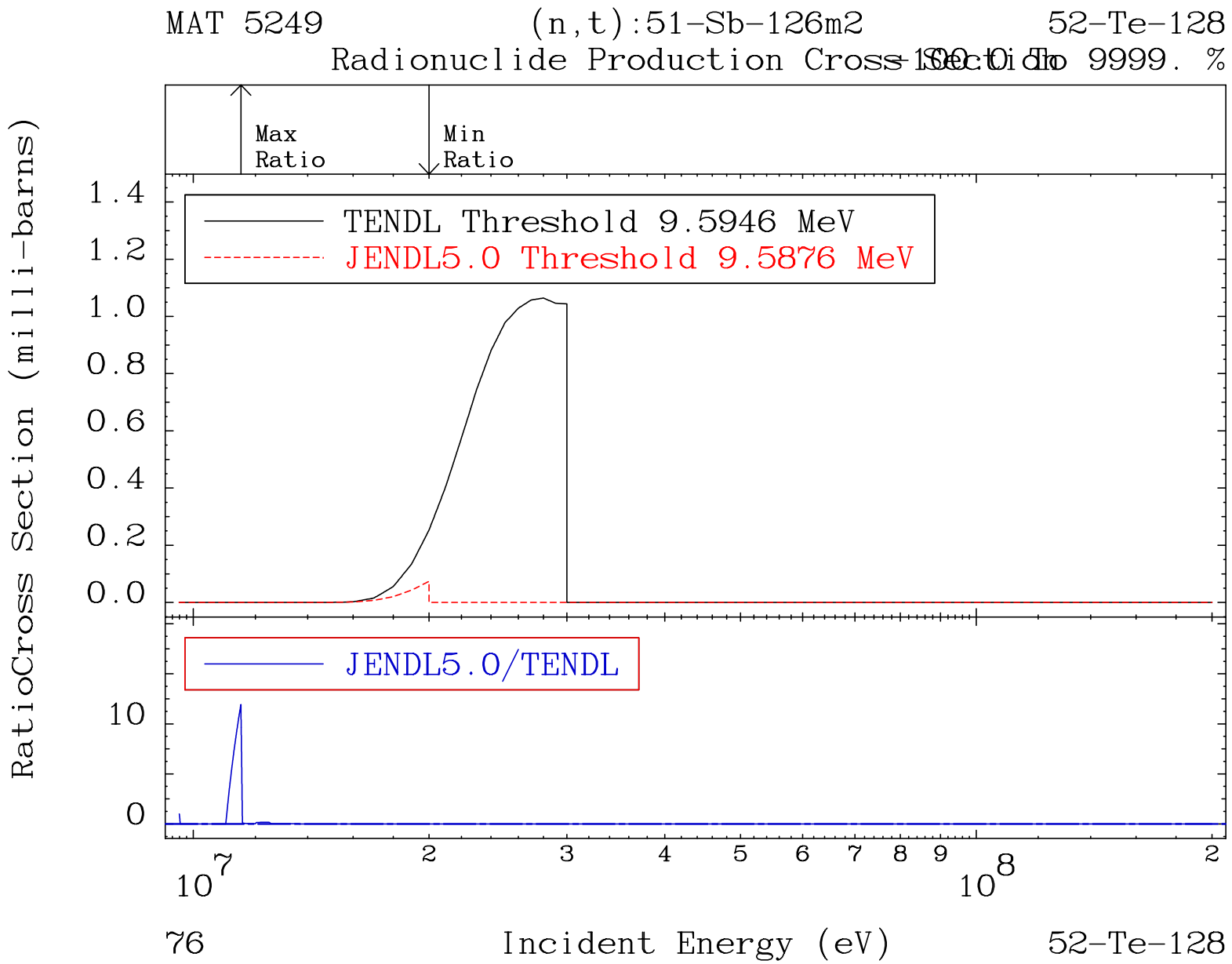

MAT 5249
(n,2n) p:51-Sb-126m2
52-Te-128
Radionuclide Production Cross Section To 9999. %
Min
Ratio
TENDL Threshold 18.143 MeV
JENDL5.0 Threshold 18.136 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
12
6
0
2
3
4
5
6
7
8
9
10^8
2
71
Incident Energy (eV)
52-Te-128

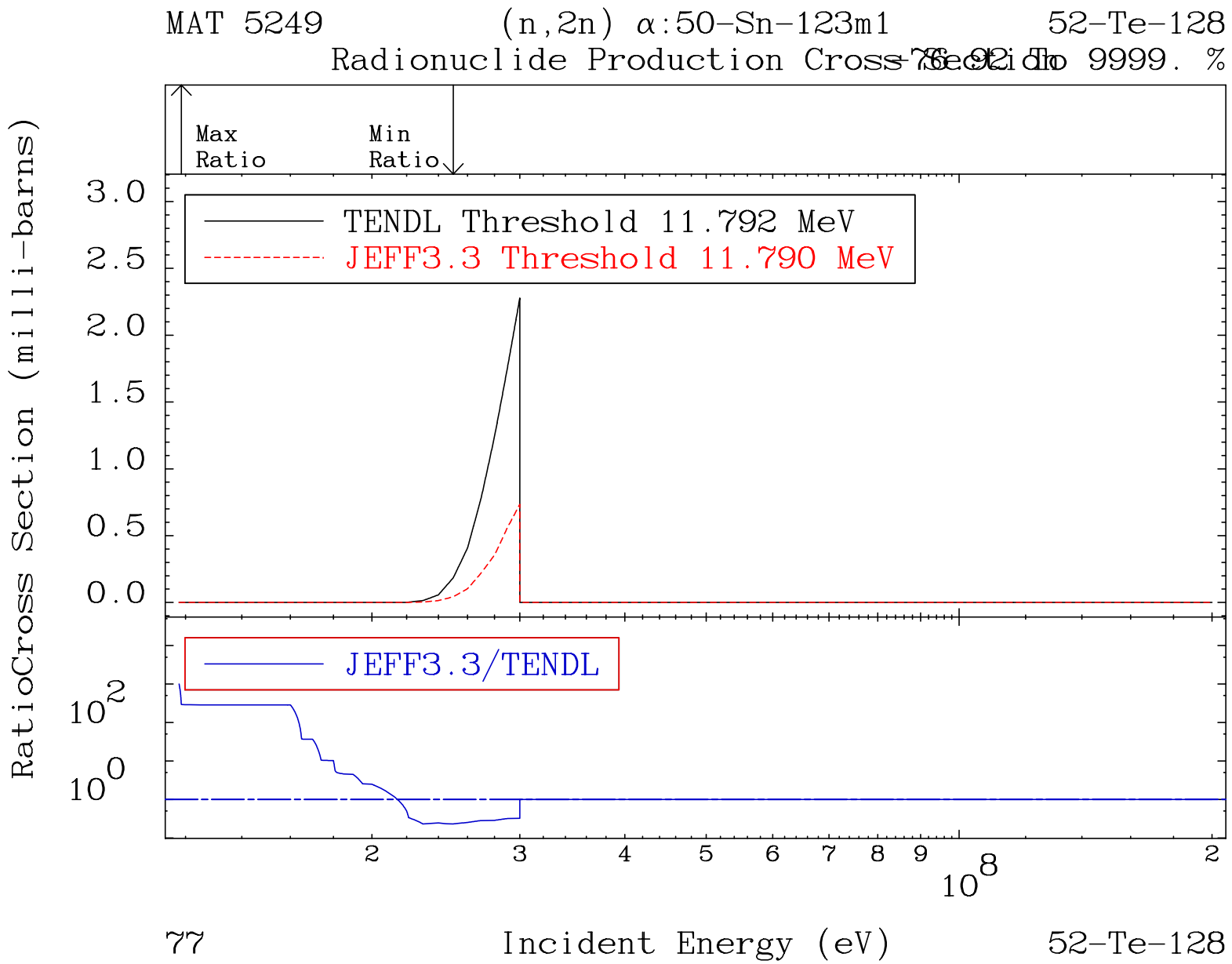

MAT 5249
(n,p):51-Sb-128g
52-Te-128
Radionuclide Production Cross Section To 9999. %
Max
Ratio
TENDL Threshold 3.6098 MeV
JENDL5.0 Threshold 3.6296 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
72
52-Te-128

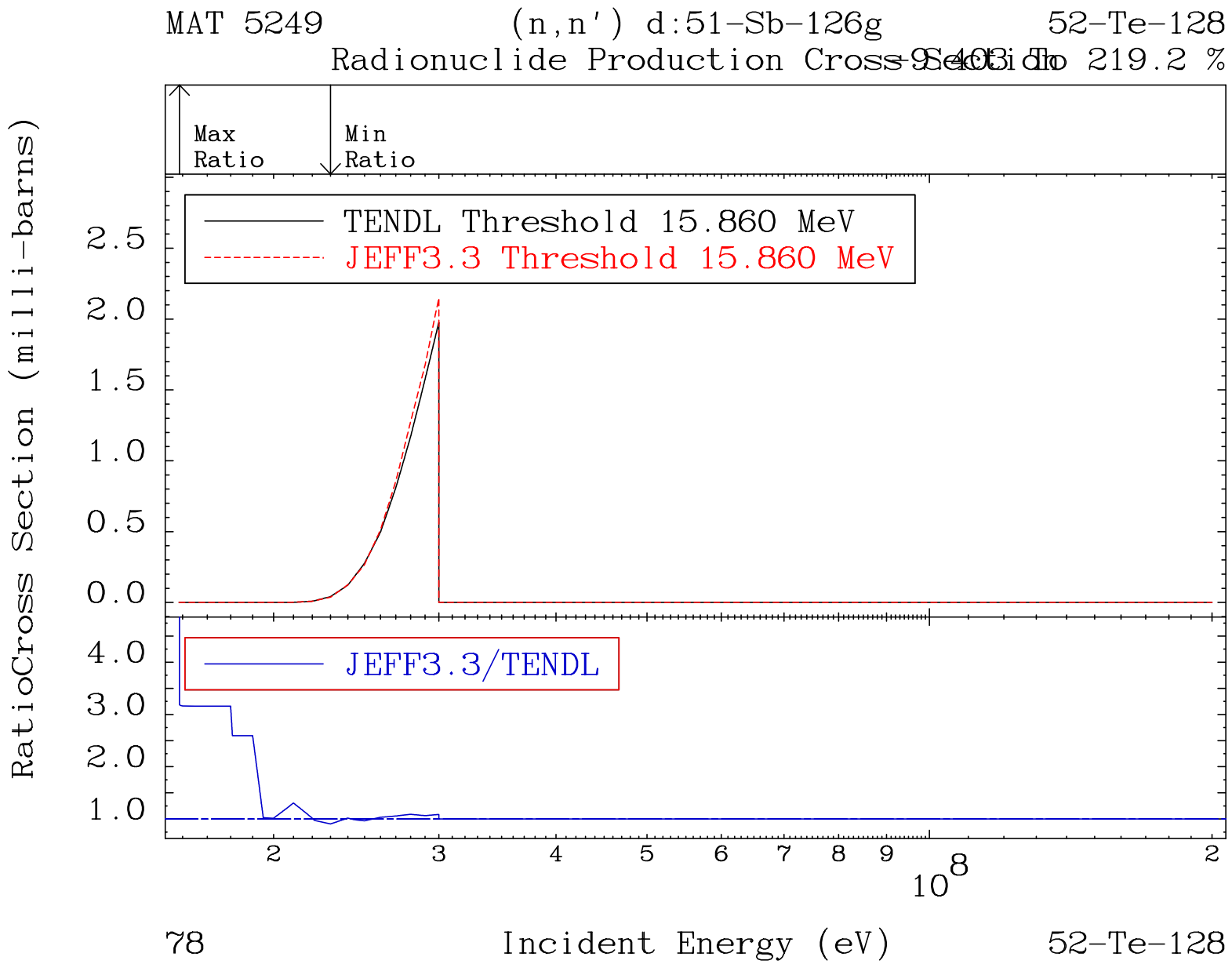

MAT 5249
(n,p):51-Sb-128m1
52-Te-128
Radionuclide Production Cross Section To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 3.7207 MeV
JENDL5.0 Threshold 3.6297 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
15
10
5
0
200
0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
73
Incident Energy (eV)
52-Te-128

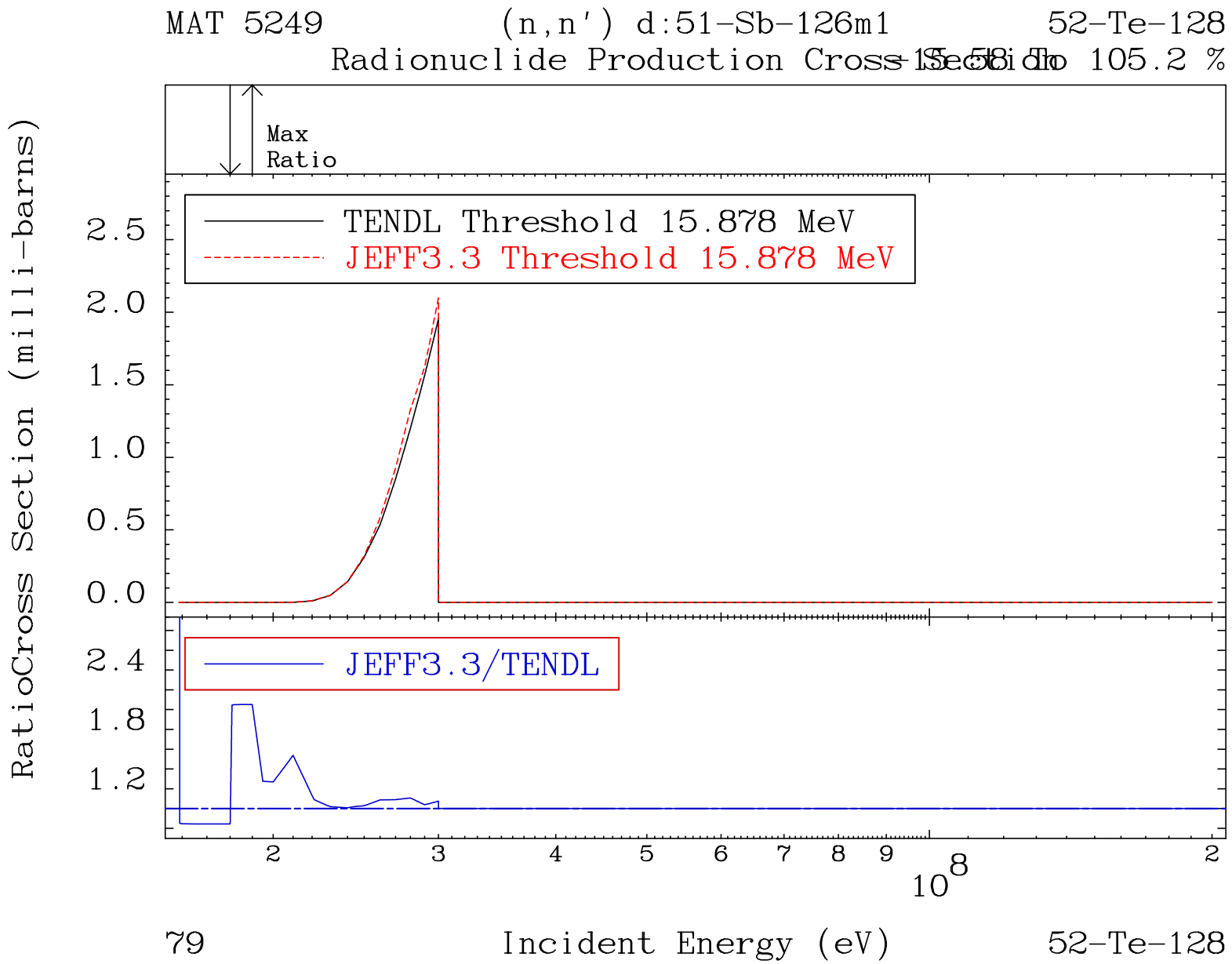

MAT 5249
(n,t):51-Sb-126g
52-Te-128
Radionuclide Production Cross Section To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 9.5539 MeV
JENDL5.0 Threshold 9.5469 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
8
4
0
10^7
2
3
4
5
6
7
8
9
10^8
2
74
Incident Energy (eV)
52-Te-128

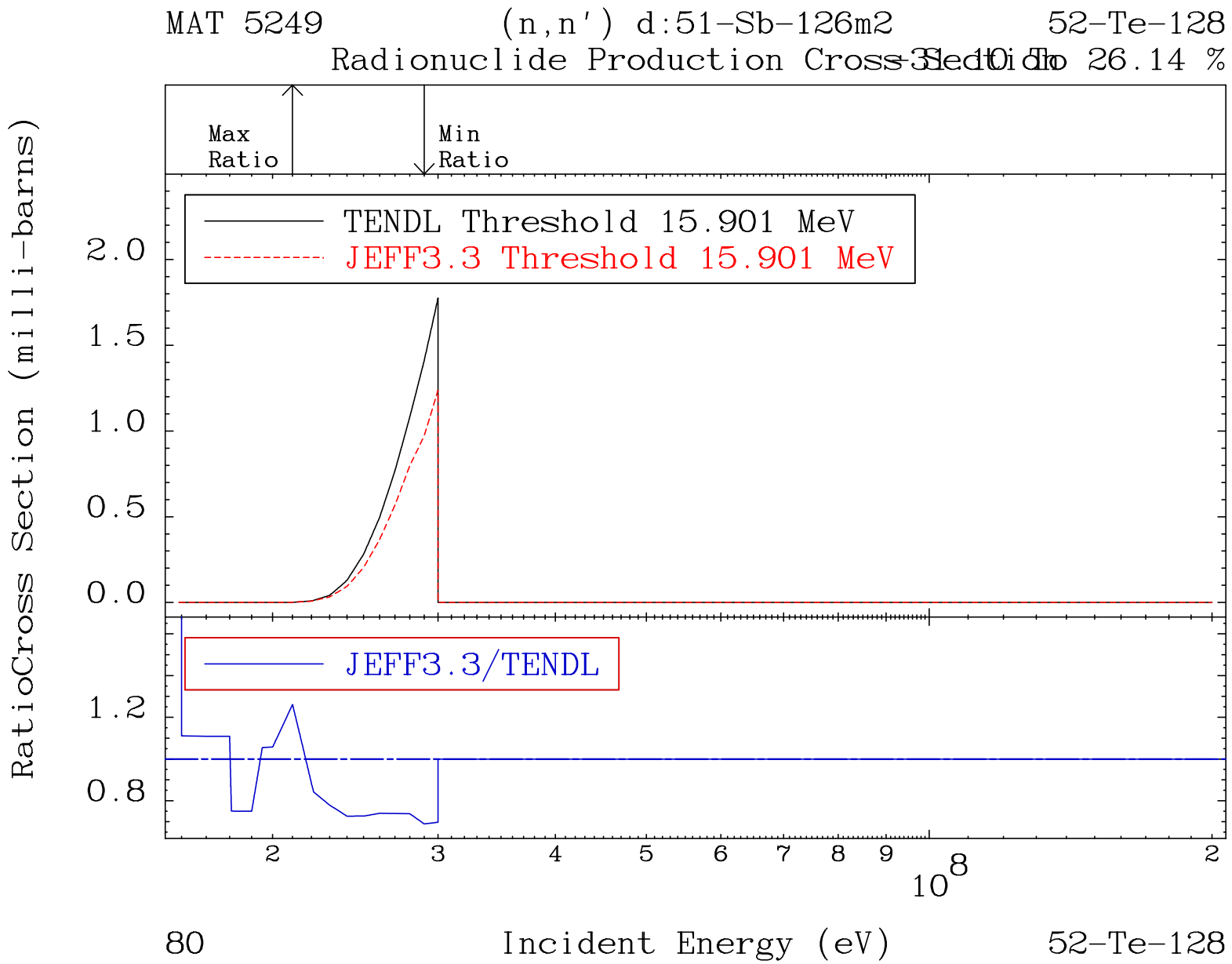

MAT 5249
(n,t):51-Sb-126m1
52-Te-128
Radionuclide Production Cross Section To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 9.5717 MeV
JENDL5.0 Threshold 9.5647 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
8
4
0
10^7
2
3
4
5
6
7
8
9
10^8
2
75
Incident Energy (eV)
52-Te-128

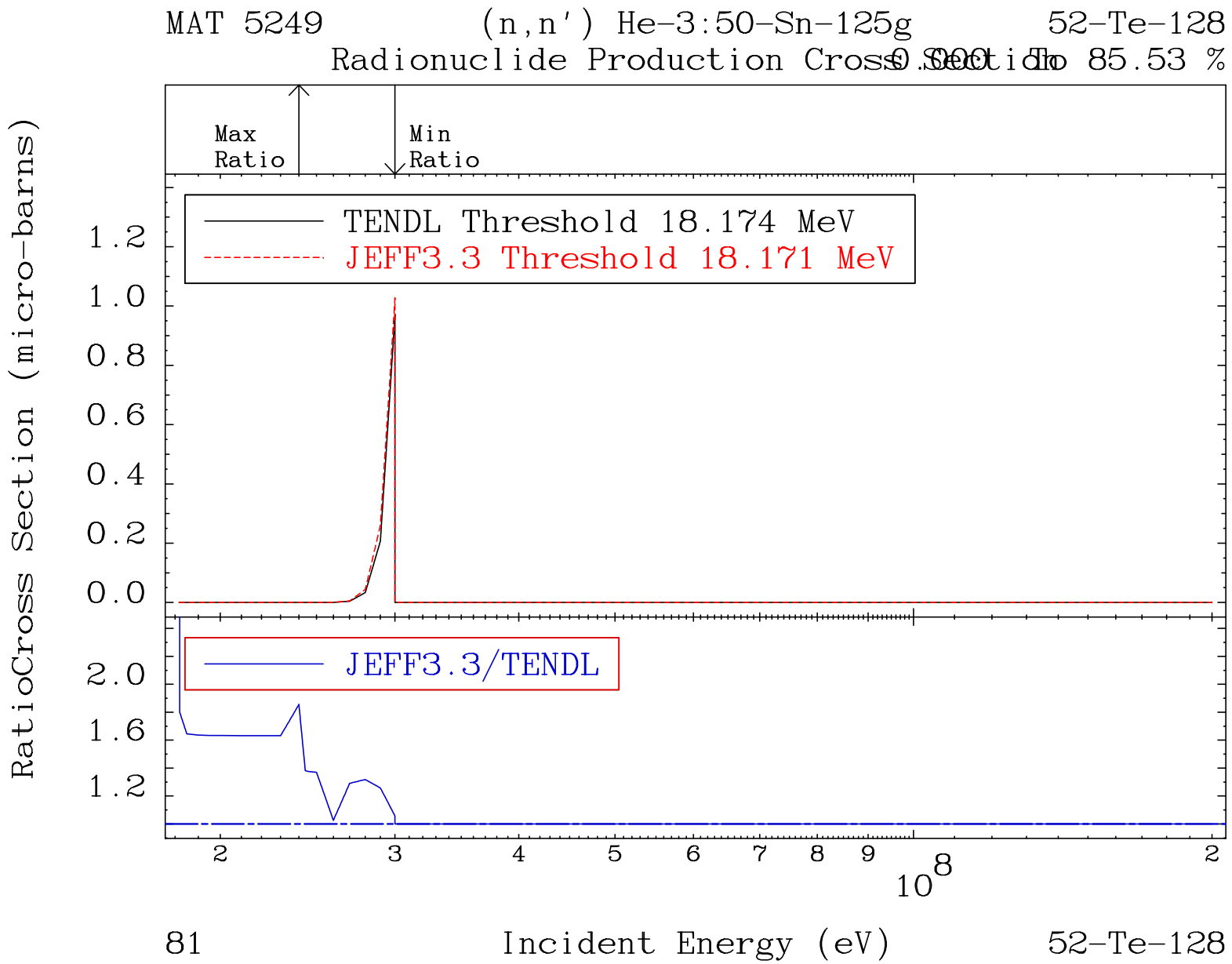

MAT 5249
(n,t):51-Sb-126m2
52-Te-128
Radionuclide Production Cross Section To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 9.5946 MeV
JENDL5.0 Threshold 9.5876 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
10
0
10^7
2
3
4
5
6
7
8
9
10^8
2
76
Incident Energy (eV)
52-Te-128

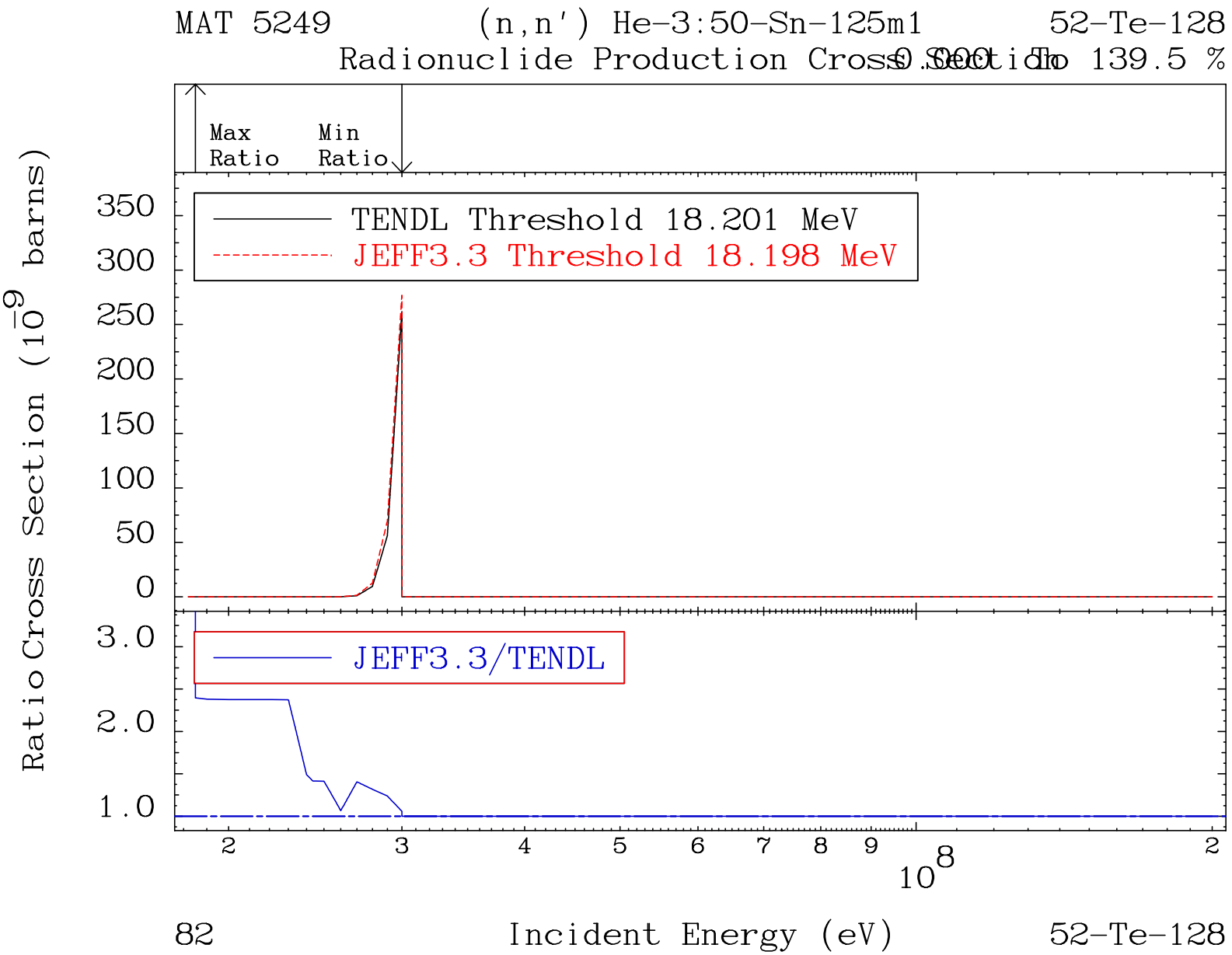

MAT 5249
(n,2n) α:50-Sn-123m1
52-Te-128
Radionuclide Production Cross Section To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 11.792 MeV
JEFF3.3 Threshold 11.790 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
77
Incident Energy (eV)
52-Te-128

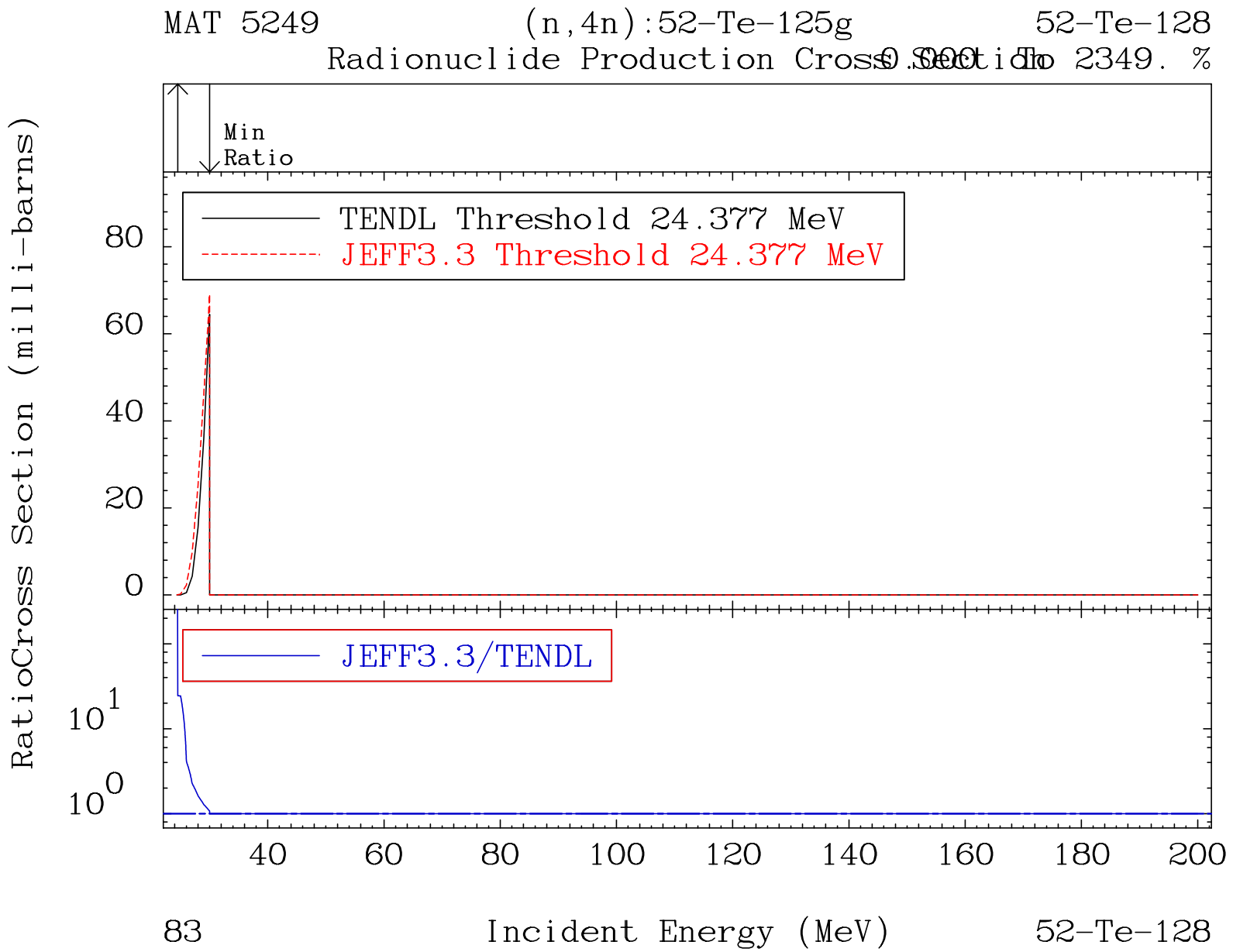

MAT 5249
(n,n') d:51-Sb-126g
52-Te-128
Radionuclide Production Cross-Section To 219.2 %
Max Ratio
Min Ratio
TENDL Threshold 15.860 MeV
JEFF3.3 Threshold 15.860 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
4.0
3.0
2.0
1.0
2
3
4
5
6
7
8
9
2
10^8
78
Incident Energy (eV)
52-Te-128

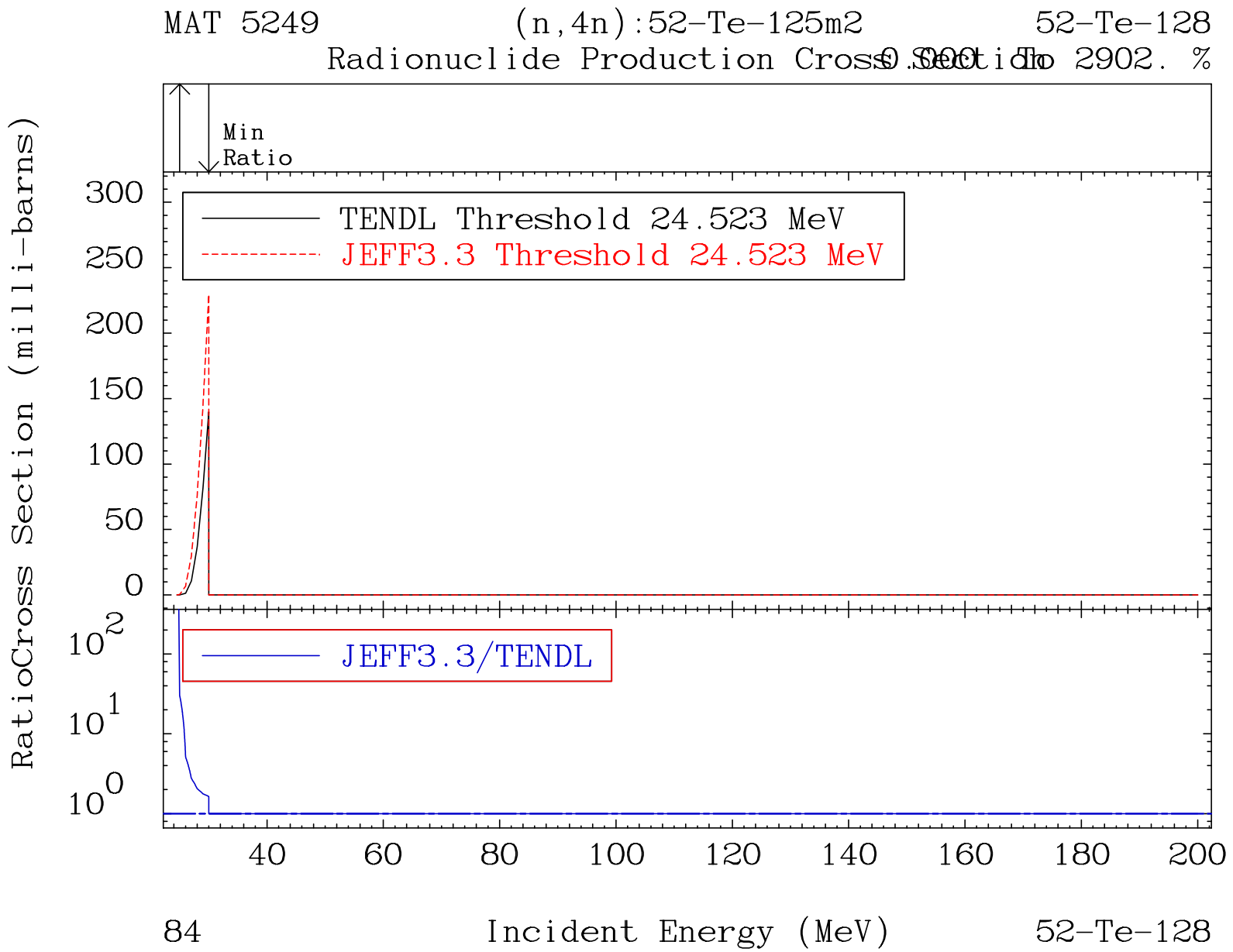

MAT 5249 (n,n') d:51-Sb-126m1 52-Te-128
Radionuclide Production Cross Section To 105.2 %
Max
Ratio
TENDL Threshold 15.878 MeV
JEFF3.3 Threshold 15.878 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
2.4
1.8
1.2
2
3
4
5
6
7
8
9
10^8
2
79
Incident Energy (eV)
52-Te-128

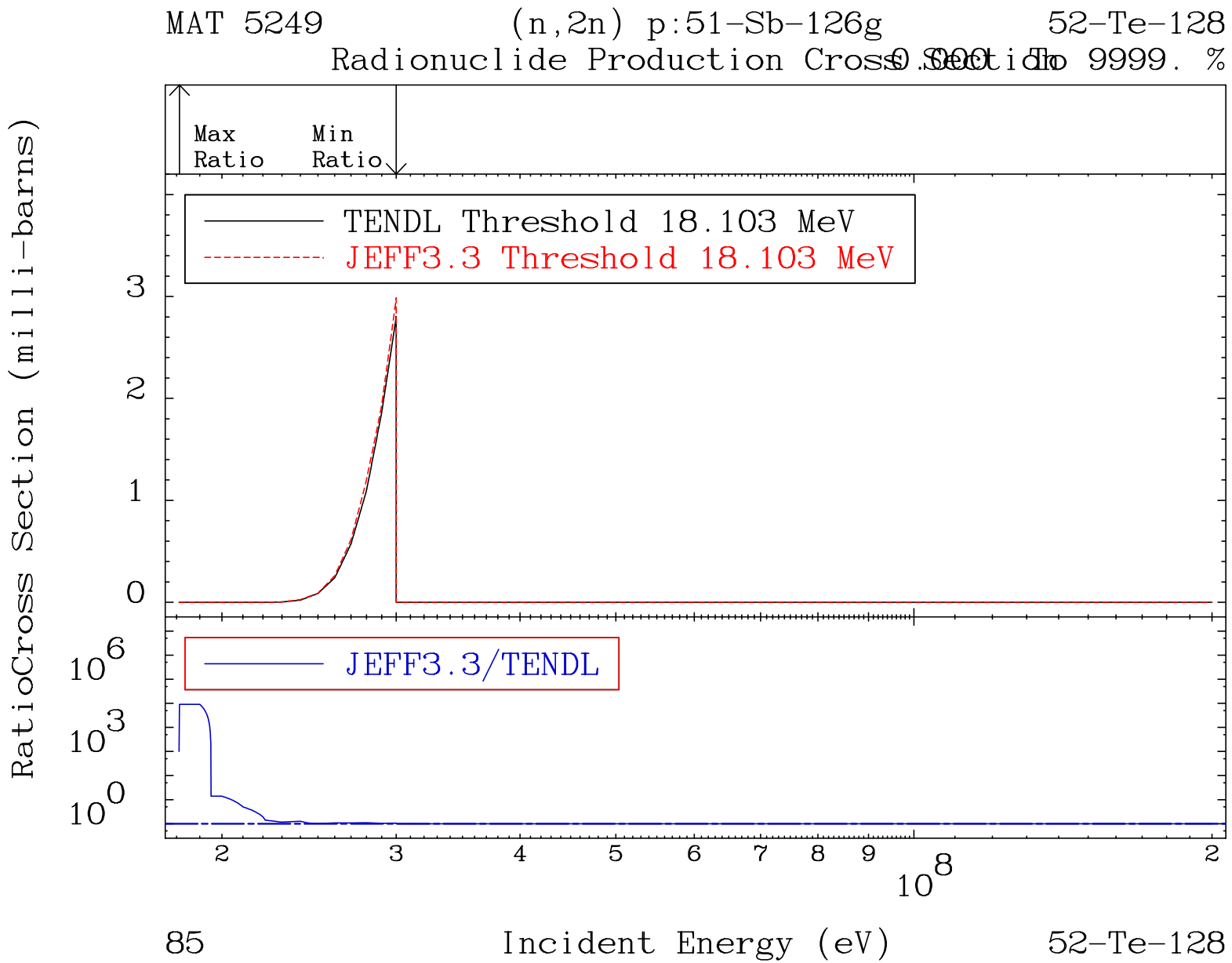

MAT 5249
(n,n') d:51-Sb-126m2
52-Te-128
Radionuclide Production Cross-Section
Max Ratio
Min Ratio
TENDL Threshold 15.901 MeV
JEFF3.3 Threshold 15.901 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
1.2
0.8
2
3
4
5
6
7
8
9
2
10^8
80
Incident Energy (eV)
52-Te-128

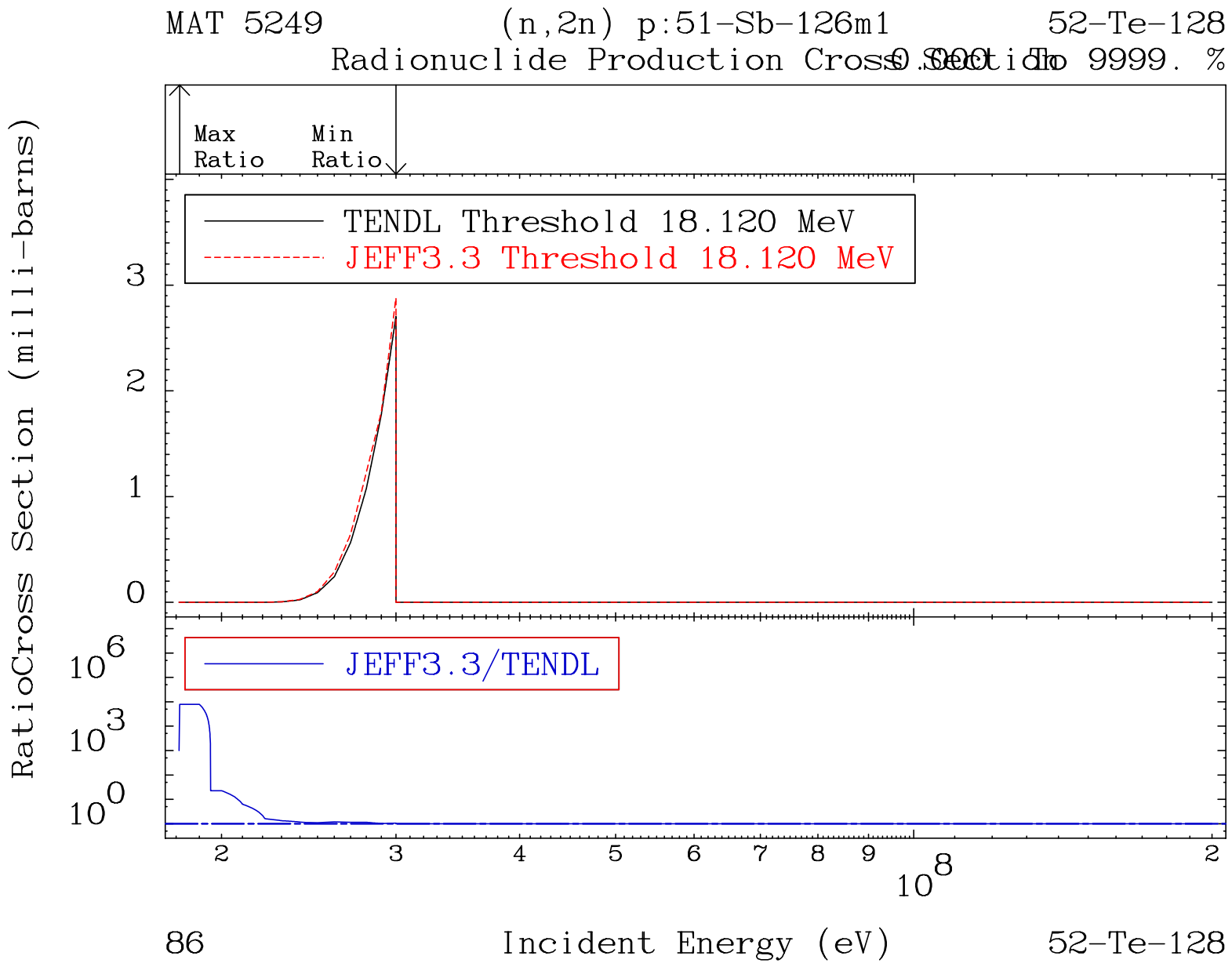

MAT 5249 (n,n') He-3:50-Sn-125g 52-Te-128
Radionuclide Production Cross Section To 85.53 %
Max Ratio
Min Ratio
TENDL Threshold 18.174 MeV
JEFF3.3 Threshold 18.171 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
2.0
1.6
1.2
2
3
4
5
6
7
8
9
10^8
2
81
Incident Energy (eV)
52-Te-128

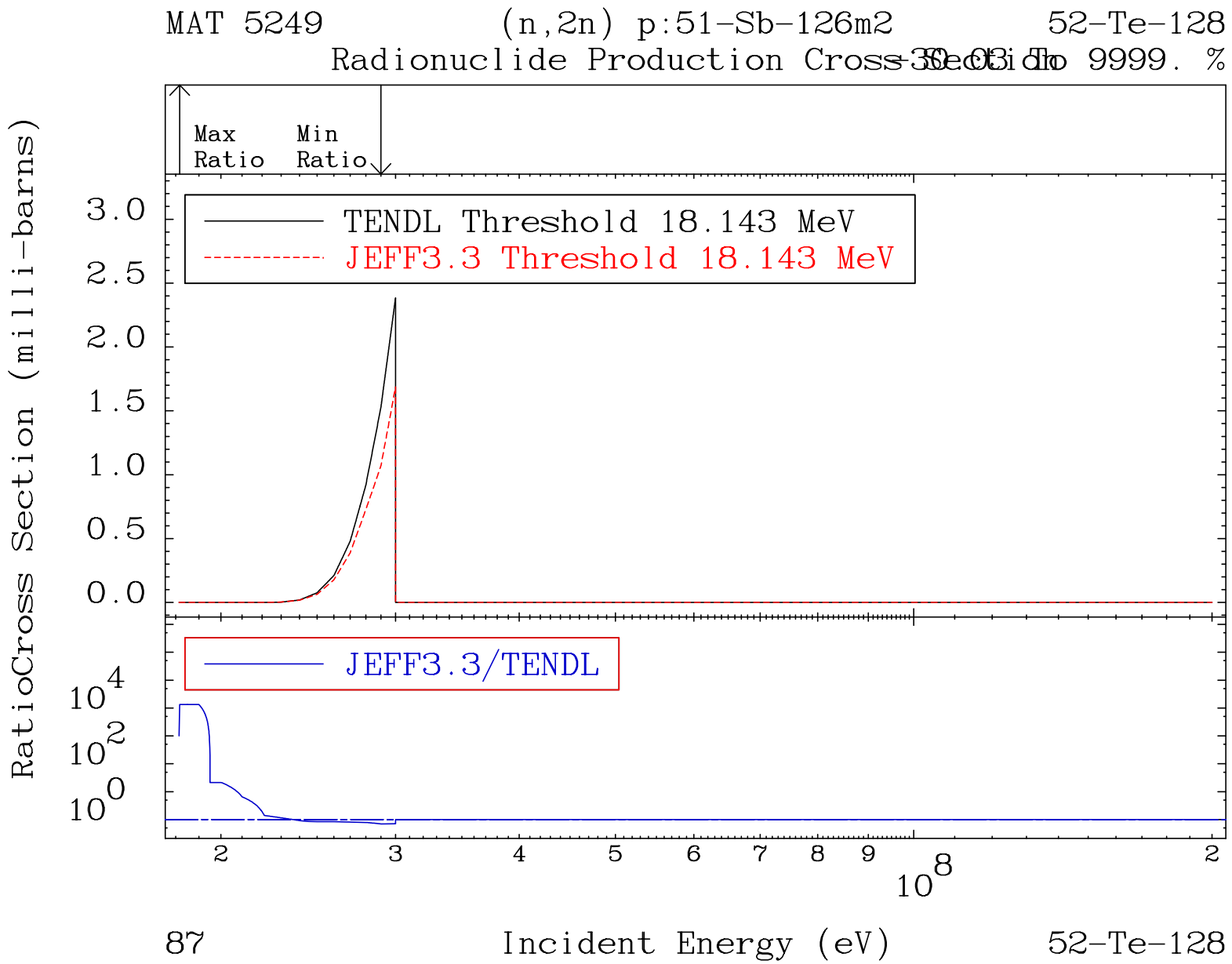

MAT 5249 (n,n') He-3:50-Sn-125m1 52-Te-128
Radionuclide Production Cross Section To 139.5 %
Max Ratio
Min Ratio
TENDL Threshold 18.201 MeV
JEFF3.3 Threshold 18.198 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
350
300
250
200
150
100
50
0
3.0
2.0
1.0
2
3
4
5
6
7
8
9
10^8
2
82
Incident Energy (eV)
52-Te-128

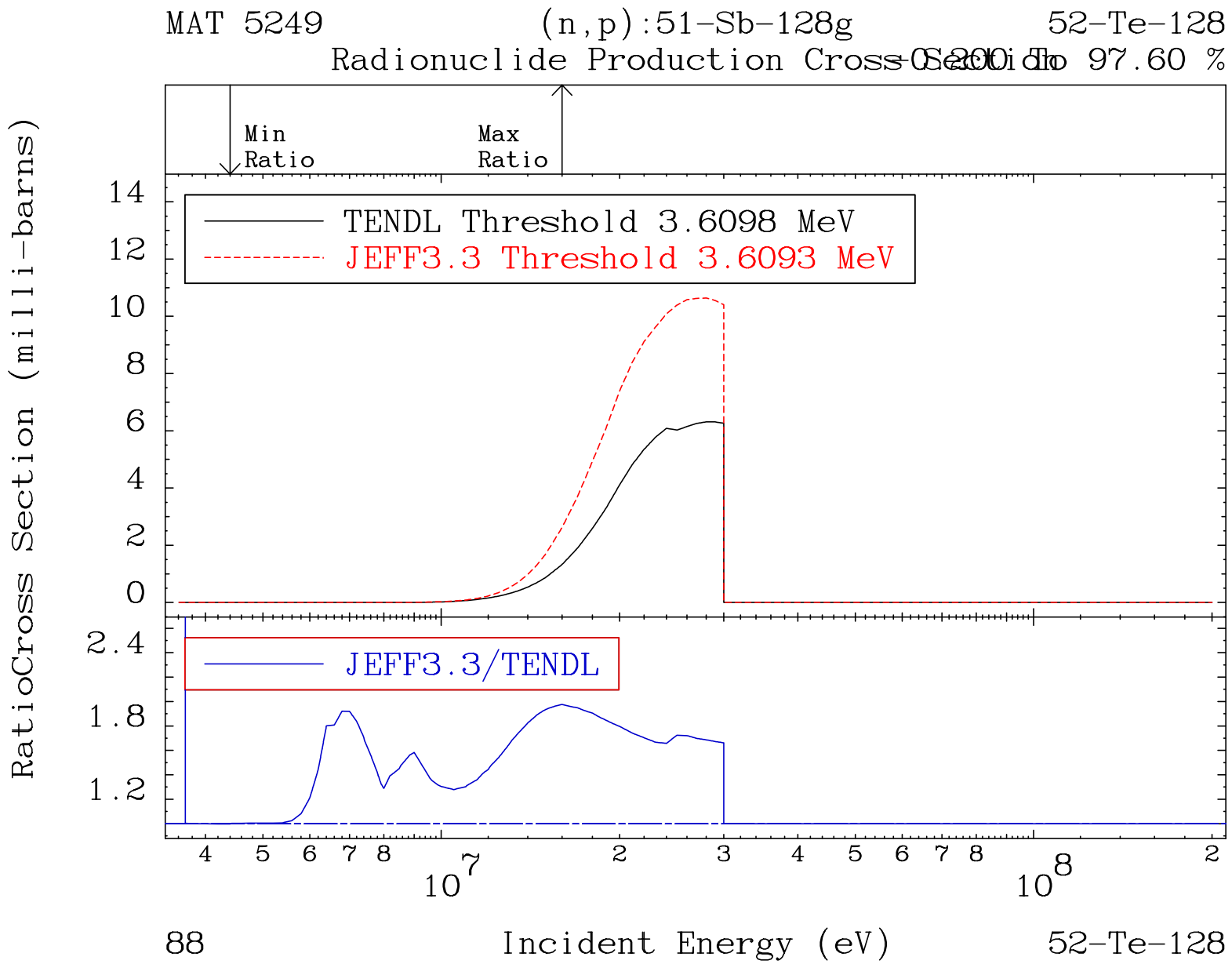

MAT 5249
(n,4n):52-Te-125g
52-Te-128
Radionuclide Production Cross Section
0.000 To 2349. %
Min
Ratio
TENDL Threshold 24.377 MeV
JEFF3.3 Threshold 24.377 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
10^1
10^0
40
60
80
100
120
140
160
180
200
83
Incident Energy (MeV)
52-Te-128

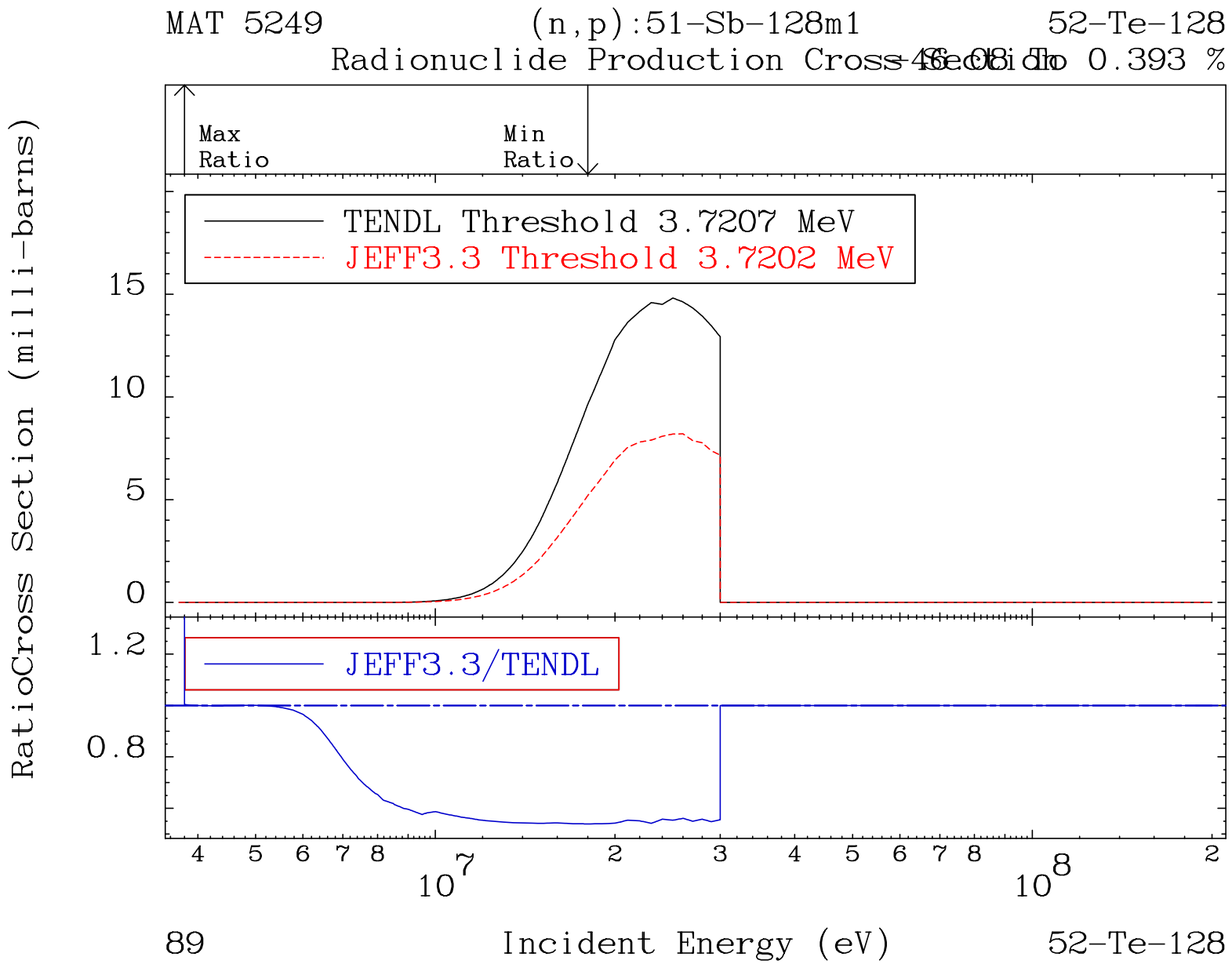

MAT 5249
(n,4n):52-Te-125m2
52-Te-128
Radionuclide Production Cross Section
0.000 To 2902. %
Min
Ratio
TENDL Threshold 24.523 MeV
JEFF3.3 Threshold 24.523 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
10^2
10^1
10^0
40
60
80
100
120
140
160
180
200
84
Incident Energy (MeV)
52-Te-128

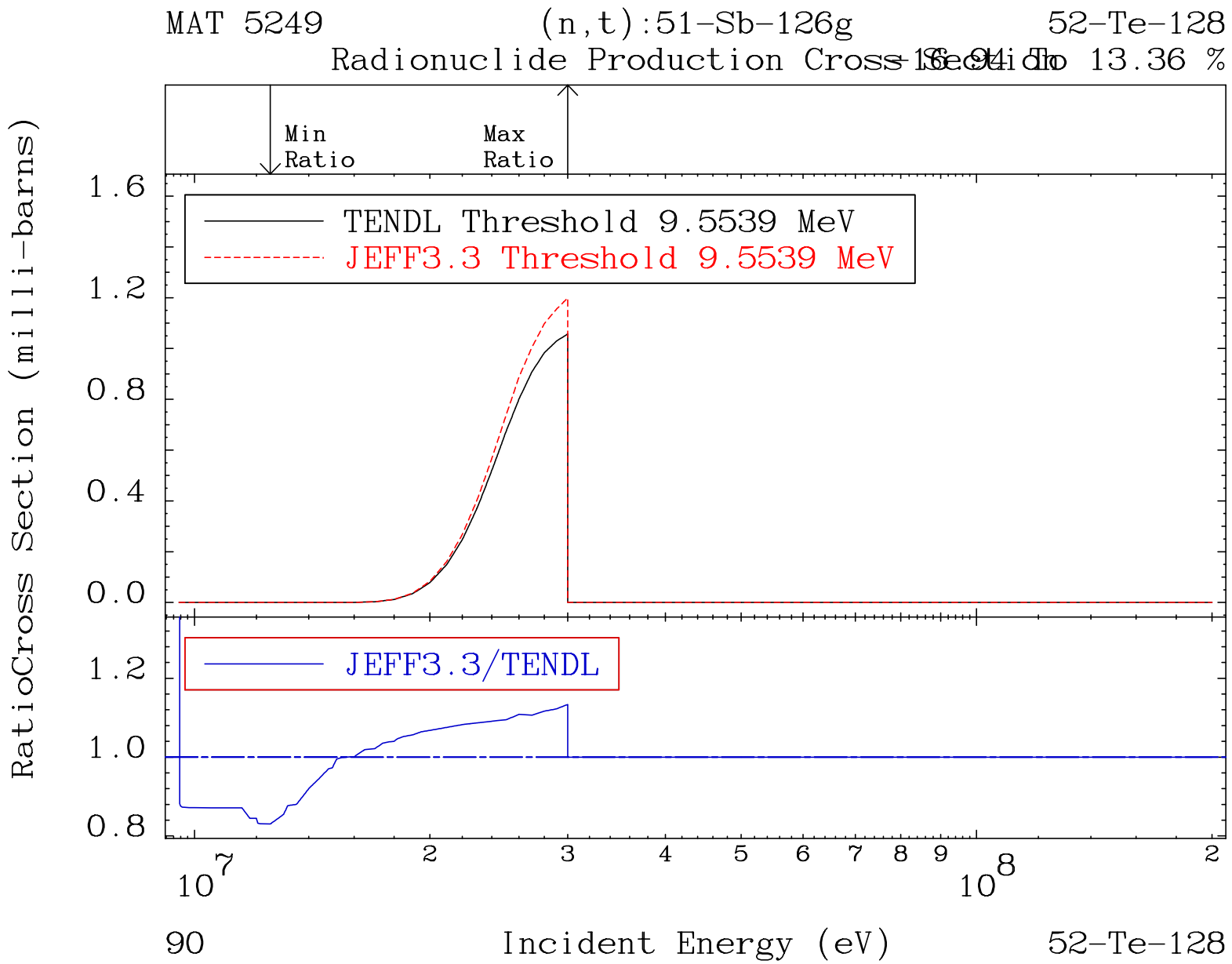

MAT 5249
(n,2n) p:51-Sb-126g
52-Te-128
Radionuclide Production Cross Section
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 18.103 MeV
JEFF3.3 Threshold 18.103 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
85
52-Te-128

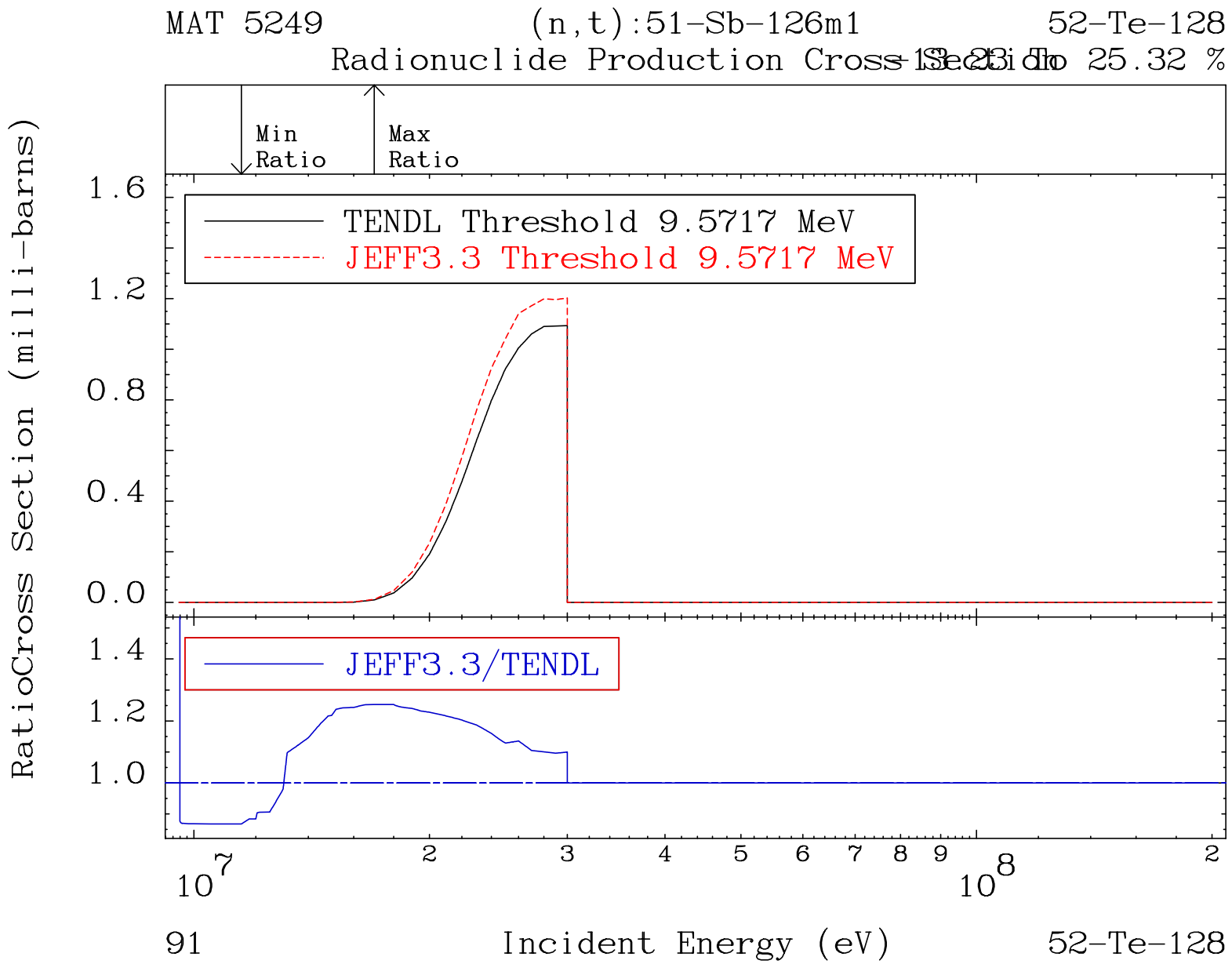

MAT 5249 (n,2n) p:51-Sb-126m1 52-Te-128
Radionuclide Production Cross Section
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 18.120 MeV
JEFF3.3 Threshold 18.120 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
86
52-Te-128
52-Te-128

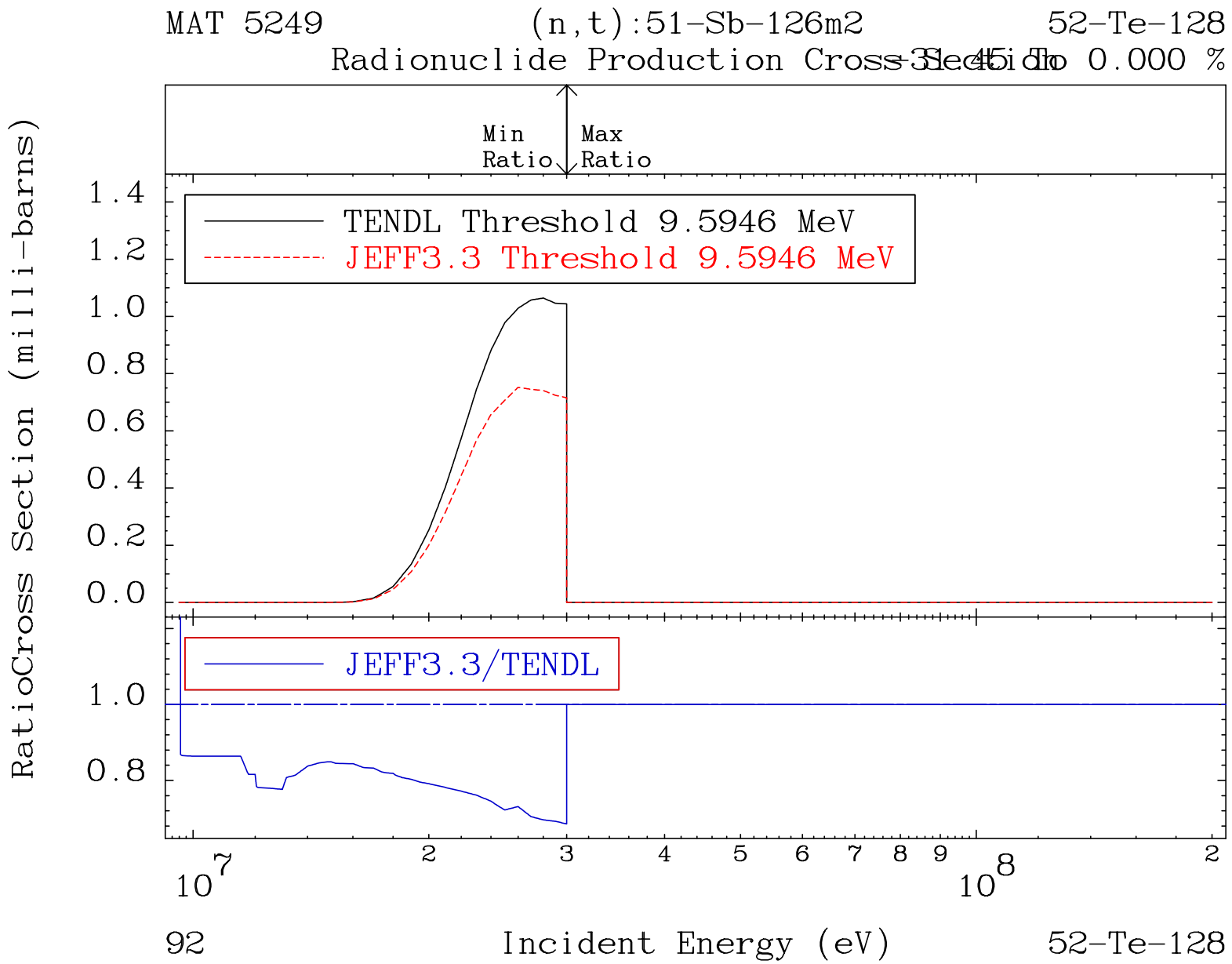

MAT 5249
(n,2n) p:51-Sb-126m2
52-Te-128
Radionuclide Production Cross Section To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 18.143 MeV
JEFF3.3 Threshold 18.143 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
87
Incident Energy (eV)
52-Te-128

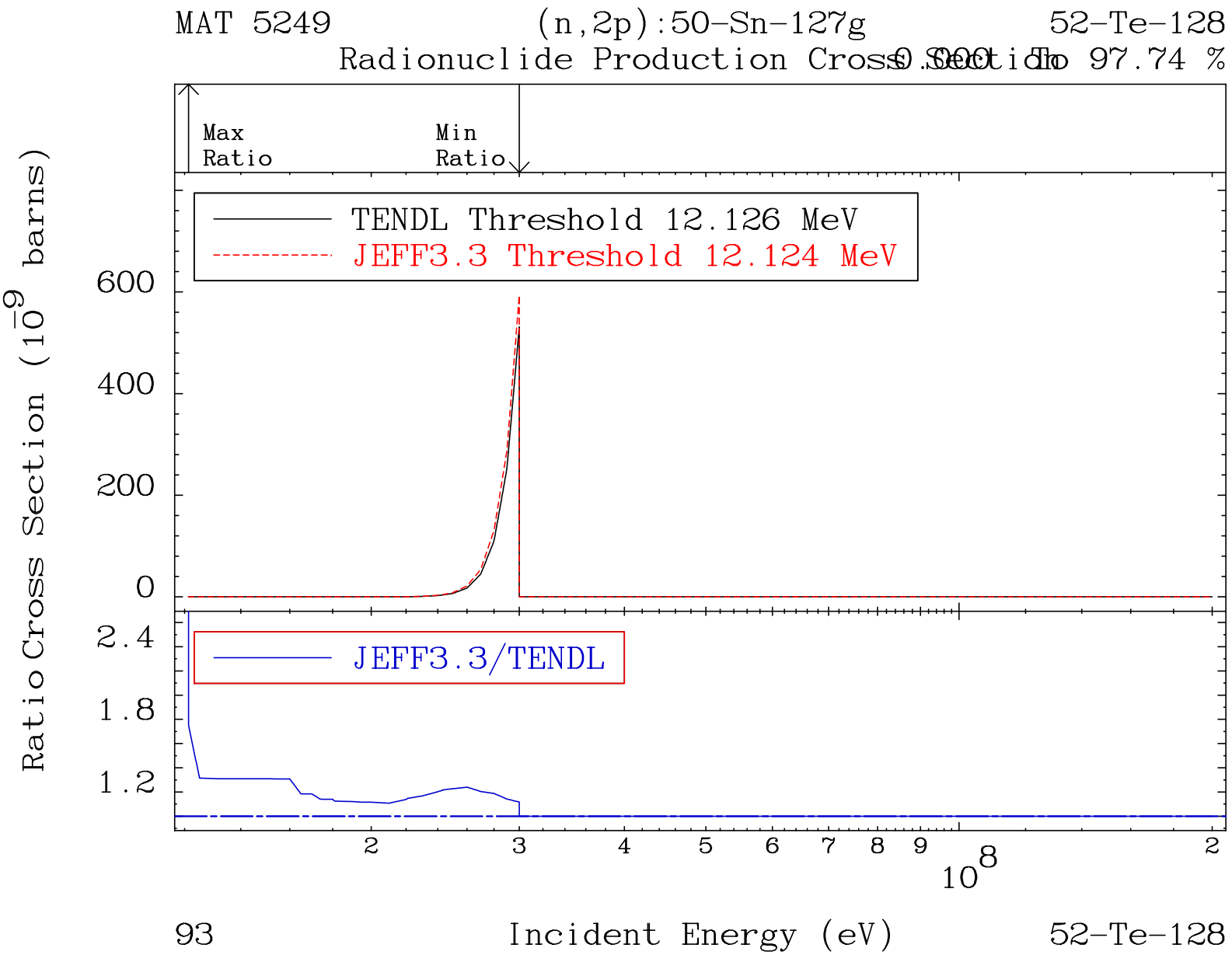

MAT 5249
(n,p):51-Sb-128g
52-Te-128
Radionuclide Production Cross Section To 97.60 %
Min Ratio
Max Ratio
TENDL Threshold 3.6098 MeV
JEFF3.3 Threshold 3.6093 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
88
52-Te-128

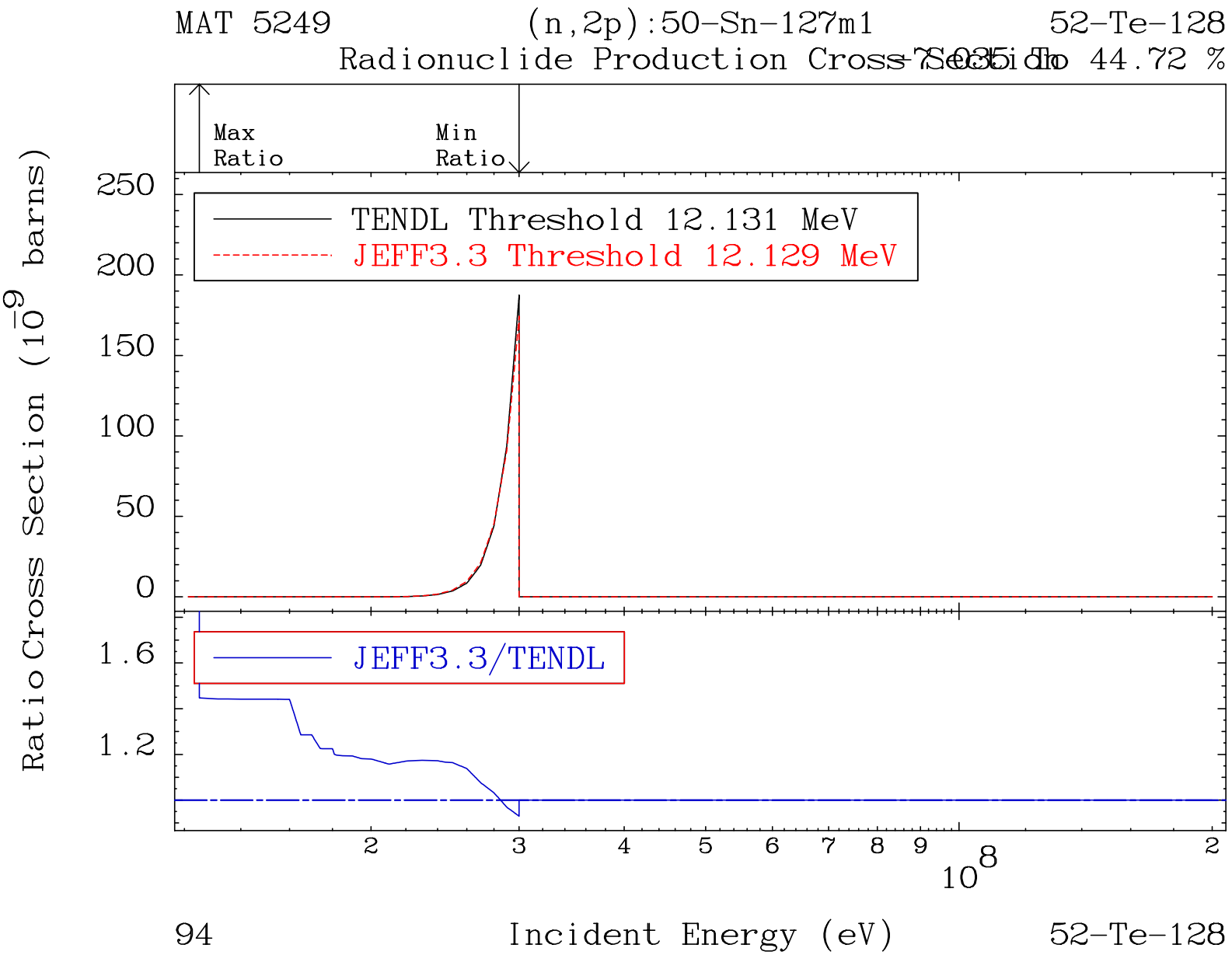

MAT 5249
(n,p):51-Sb-128m1
52-Te-128
Radionuclide Production Cross Section To 0.393 %
Max Ratio
Min Ratio
TENDL Threshold 3.7207 MeV
JEFF3.3 Threshold 3.7202 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
15
10
5
0
1.2
0.8
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
89
Incident Energy (eV)
52-Te-128

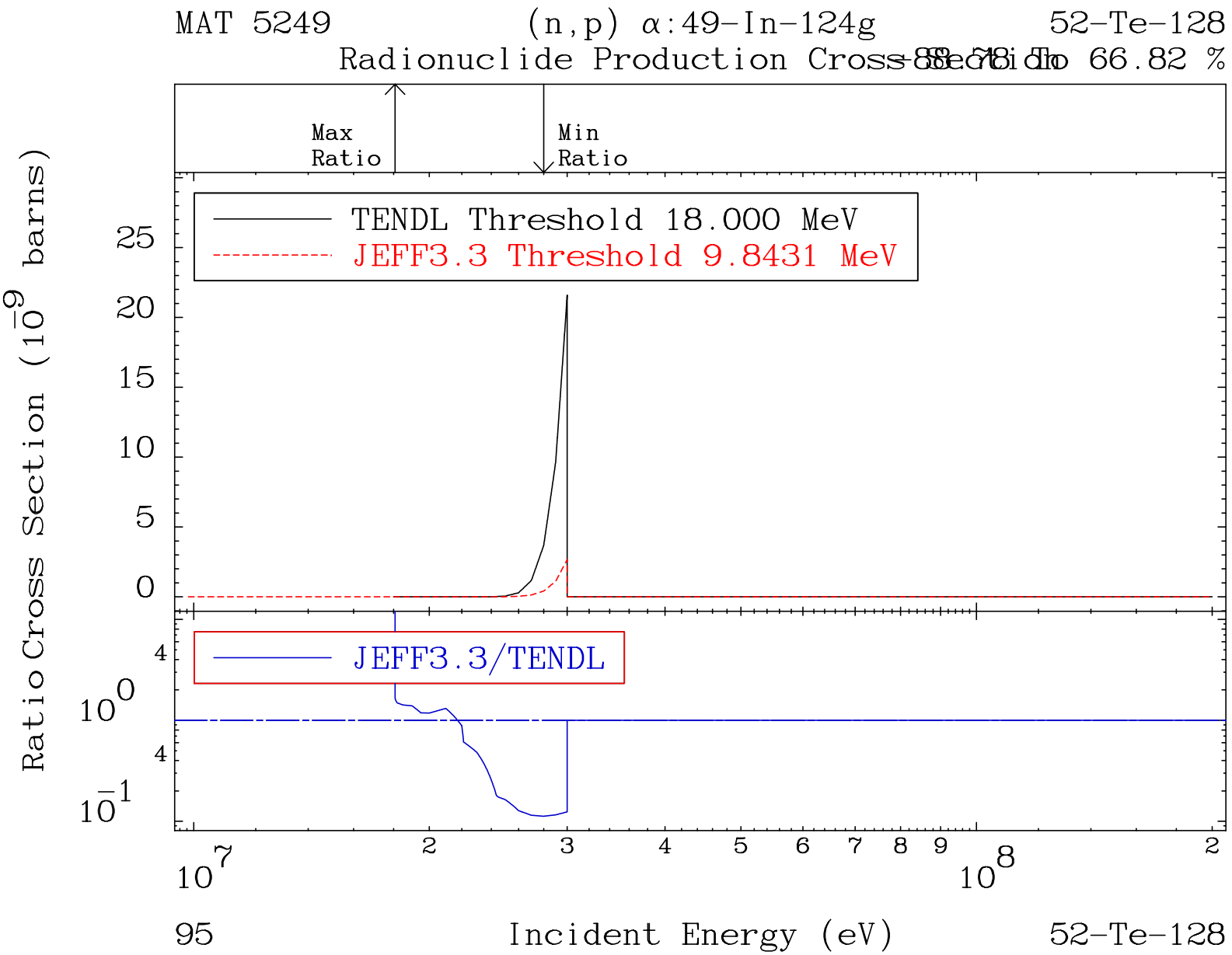

MAT 5249
(n,t):51-Sb-126g
52-Te-128
Radionuclide Production Cross Section To 13.36 %
Min Ratio
Max Ratio
TENDL Threshold 9.5539 MeV
JEFF3.3 Threshold 9.5539 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
1.6
1.2
0.8
0.4
0.0
1.2
1.0
0.8
10^7
2
3
4
5
6
7
8
9
10^8
2
90
Incident Energy (eV)
52-Te-128

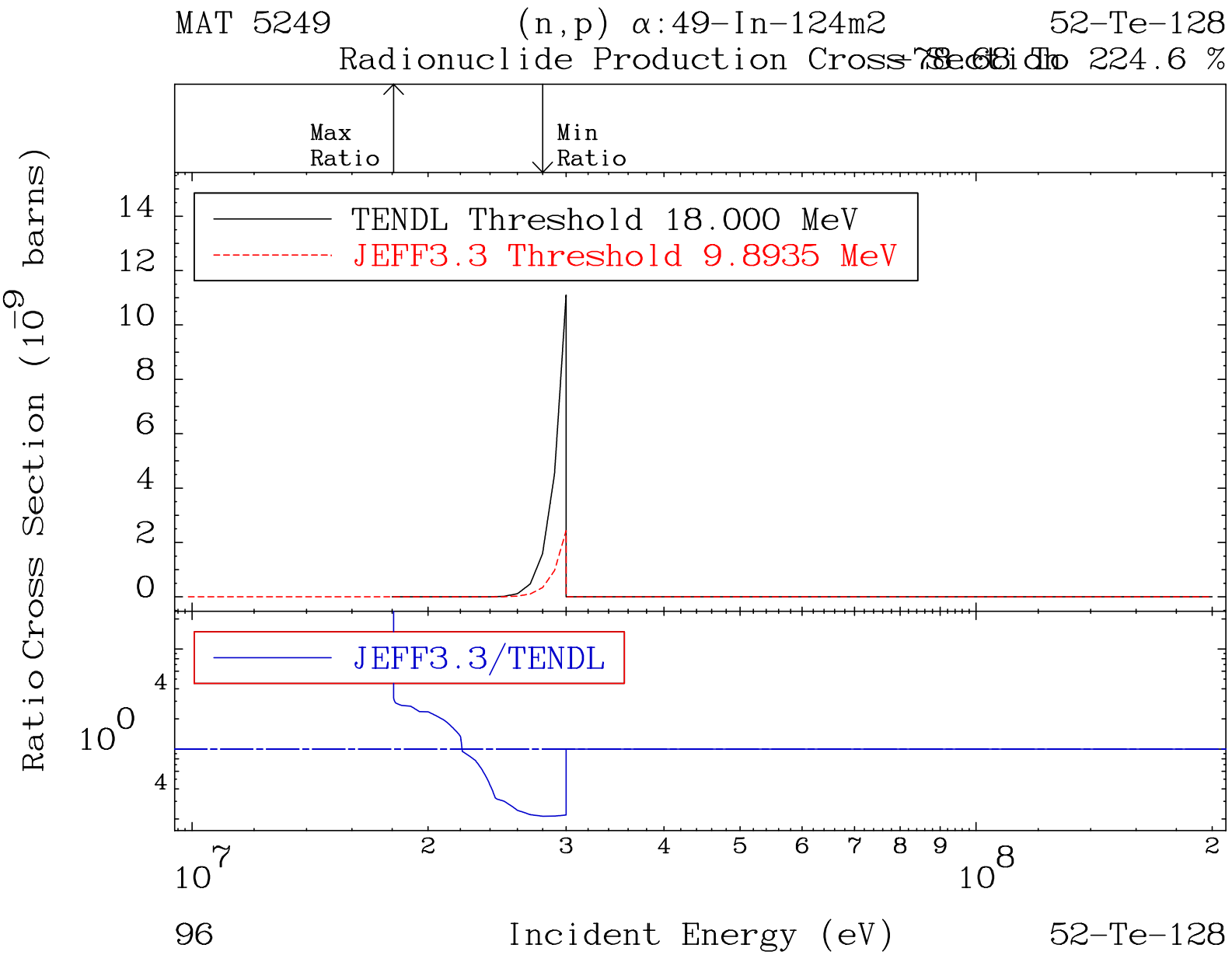

MAT 5249
(n,t):51-Sb-126m1
52-Te-128
Radionuclide Production Cross Section To 25.32 %
Min Ratio
Max Ratio
TENDL Threshold 9.5717 MeV
JEFF3.3 Threshold 9.5717 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
1.6
1.2
0.8
0.4
0.0
1.4
1.2
1.0
10^7
2
3
4
5
6
7
8
9
10^8
2
91
Incident Energy (eV)
52-Te-128


MAT 5249
(n,t):51-Sb-126m2
52-Te-128
Radionuclide Production Cross Section To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 9.5946 MeV
JEFF3.3 Threshold 9.5946 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1.0
0.8
10^7
2
3
4
5
6
7
8
9
10^8
2
92
Incident Energy (eV)
52-Te-128


MAT 5249
(n,2p):50-Sn-127g
52-Te-128
Radionuclide Production Cross Section
0.000 To 97.74 %
Max Ratio
Min Ratio
TENDL Threshold 12.126 MeV
JEFF3.3 Threshold 12.124 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^-9 barns)
600
400
200
0
2.4
1.8
1.2
2
3
4
5
6
7
8
9
10^8
2
93
Incident Energy (eV)
52-Te-128


MAT 5249
(n,2p):50-Sn-127m1
52-Te-128
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 12.131 MeV
JEFF3.3 Threshold 12.129 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
Incident Energy (eV)
94
52-Te-128


MAT 5249
(n,p) α:49-In-124g
52-Te-128
Radionuclide Production Cross Section To 66.82 %
Max Ratio
Min Ratio
TENDL Threshold 18.000 MeV
JEFF3.3 Threshold 9.8431 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^-9 barns)
Incident Energy (eV)
95
52-Te-128


MAT 5249
(n,p) α:49-In-124m2
52-Te-128
Radionuclide Production Cross Section To 224.6 %
Max Ratio
Min Ratio
TENDL Threshold 18.000 MeV
JEFF3.3 Threshold 9.8935 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
Incident Energy (eV)
96
52-Te-128